

Bachelor's Degree Scheme in Interdisciplinary Studies (BDSIS)

Programme Requirement Document 2026/27

College of Undergraduate Studies

Bachelor's Degree Scheme in Interdisciplinary Studies (BDSIS)

(For the cohort of students admitted in the 2026/27 academic year)

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This Programme Requirement Document should be read in conjunction with the [Student Handbook for Taught Programmes](#) of the relevant year and the latest version of the [Handbook on Academic Regulations for Taught Programmes](#). Please refer to the Student Handbook for matters not shown in this Document.

This document is subject to review and changes which the programme offering Department/University can decide to make from time to time. Students will be informed of the changes as and when appropriate.

September 2026

PART A PROGRAMME SCHEME

1) GENERAL INFORMATION

Scheme Title:

Bachelor's Degree Scheme in Interdisciplinary Studies (BDSIS)
跨學科組合學士課程

Scheme Code:

81401

Total credit requirements for graduation:

Minimum 120 credits

Mode of Attendance:

Full-time

Normal Programme Duration:

4 years

Host Department:

College of Undergraduate Studies

Final Award:

BA/ BBA/ BEng / BSc (Hons) in Interdisciplinary Studies (with a focus on XXX)
跨學科（榮譽）文/工商管理/工程/理學士（XXX專門）

Medium of Instruction

English

Programme Management:

Programme Leader
Prof. Alan P.T. LAU
alan.pt.lau@polyu.edu.hk

2) AIMS, LEARNING OUTCOMES OF THE PROGRAMME

2.1 Programme Aims

The programme aims to provide a unique educational opportunity for top-performing undergraduate students to grapple with global challenges through interdisciplinary studies. This programme is designed to inspire students to adopt an innovative, interest-driven and inspiring approach in their academic journey, offering them flexible learning pathways and curriculum options, personalised coaching, and in-depth mentorship and guaranteed outside-classroom and non-local learning opportunities, allowing them to excel in their academic pursuits.

2.2 Learning Outcomes

Learning Outcomes provide a broad description of the intellectual abilities, knowledge, skills and attributes to be developed in all students.

The programme intended learning outcomes of BDSIS are outlined below. After completing the programme, students will be able to:

- (i) Examine real-world issues from an interdisciplinary perspective, evaluate information critically and synthesise different viewpoints to form a holistic understanding.
- (ii) Integrate and apply in-depth knowledge and modes of thinking from two or more disciplines to develop innovative and entrepreneurial solutions to complex local, national and/or global challenges.
- (iii) Demonstrate readiness to lead with integrity, pride, professionalism and commitment in specific areas of sustainable development and engage in initiatives for creating a sustainable future for the benefit of society.
- (iv) Communicate and collaborate effectively with people from different disciplines and sectors with sensitivity and understanding.
- (v) Commit to lifelong learning, plan their studies purposefully and adapt effectively to different learning situations and challenging circumstances.

PolyU's Graduate Attributes and Institutional Learning Outcomes are presented below:

Graduate Attributes	Learning Outcomes for bachelor's degree (BDSIS) level
<i>Socially responsible leaders with a strong sense of national pride and a global outlook</i>	Care about and understand local, national and global issues, and be able to think globally, act responsibly, and lead with integrity and pride for the benefit of society and a sustainable future.
<i>Future-ready professionals who possess technical acumen</i>	Be able to integrate and apply in-depth discipline knowledge and specialised skills, leverage changing and emerging technologies for work, function in variable interdisciplinary contexts, and demonstrate professionalism and entrepreneurial spirit at work.
<i>Critical thinkers and creative problem solvers</i>	Be able to critically evaluate information and arguments, draw logical and informed conclusions, identify problems and formulate innovative solutions, in both professional and everyday contexts.

<i>Effective communicators and collaborators</i>	Be able to communicate effectively in English and Chinese in professional and everyday contexts, collaborate with people from diverse backgrounds and different perspectives, and contribute to effective teamwork and positive group dynamics.
<i>Adaptable and resilient lifelong learners</i>	Committed to continual learning and self-improvement, engage in learning with a sense of purpose, manage their own learning, adapt to different learning situations, and deal effectively with the arising stress and challenges.

Mapping of the programme intended learning outcomes with the PolyU's Graduate Attributes is provided below:

BDSIS Programme intended learning outcomes	Mapping of PolyU's Graduate Attributes
(i) Examine real-world issues from an interdisciplinary perspective, evaluate information critically and synthesise different viewpoints to form a holistic understanding.	<i>Future-ready professionals who possess technical acumen</i>
(ii) Integrate and apply in-depth knowledge and modes of thinking from two or more disciplines to develop innovative and entrepreneurial solutions to complex local, national and/or global challenges.	<i>Critical thinkers and creative problem solvers</i>
(iii) Demonstrate readiness to lead with integrity, pride, professionalism and commitment in specific areas of sustainable development and engage in initiatives for creating a sustainable future for the benefit of society.	<i>Socially responsible leaders with a strong sense of national pride and a global outlook</i>
(iv) Communicate and collaborate effectively with people from different disciplines and sectors with sensitivity and understanding.	<i>Effective communicators and collaborators</i>
(v) Commit to lifelong learning, plan their studies purposefully and adapt effectively to different learning situations and challenging circumstances.	<i>Adaptable and resilient lifelong learners</i>

3) ADMISSION AND REGISTRATION

3.1 Admission to the Bachelor's Degree Scheme in Interdisciplinary Studies (BDSIS)

Please refer to the table below for the **programme-specific minimum requirements** for different qualifications:

		Minimum Requirements for 2026/27 entry
Academic Qualification (Single Sitting)	HKDSE	34.5 (out of 42.5)
	IB	40 (out of 45)
	GCEAL	3A*+1A (UCAS 216)
	JEE	Top 2% of candidates above Key University Cut-Off Score

Note:

HKDSE	=	Hong Kong Diploma of Secondary Education
IB	=	International Baccalaureate
GCEAL	=	The General Certificate of Education Advanced Level
JEE	=	Joint Entrance Examination

In addition, students are expected to demonstrate strong English language proficiency, such as achieving Level 5 or above in HKDSE.

Please refer to the following sections in the [Student Handbook for Taught Programmes](#) for the requirements of:

- Subject Exemption
- Credit Transfer
- Subject Registration and Withdrawal
- Duration for Completion of a Programme
- Deferment of Study

3.2 Study Load

For students following the progression pattern specified for their programme, they have to take the number of credits and subjects as specified in this Programme Requirement Document for each semester. Students cannot drop those subjects assigned by the College unless prior approval has been given by the College.

The normal study load is 15 credits in a semester for full-time study. The maximum study load to be taken by a student in a semester is 21 credits, unless exceptional approval is given by the Head of the programme offering Department. For such cases, students should be reminded that the study load approved should not be taken as grounds for academic appeal.

To help improve the academic performance of students on academic probation, these students will be required to take a reduced study load in the following semester (Summer Term excluded). The maximum number of credits to be taken by the students varies according to the policies of individual Departments and will be subject to the approval of the authorities concerned. Students on academic probation are required to seek academic advice from their Academic Advisors (Personal Academic Mentors) on their study loads and subjects to be taken.

Please refer to the “Study Load” section in the [Handbook on Academic Regulations for Taught Programmes](#) for other details.

4) CURRICULUM STRUCTURE

A brief summary of the credit requirements is presented below:

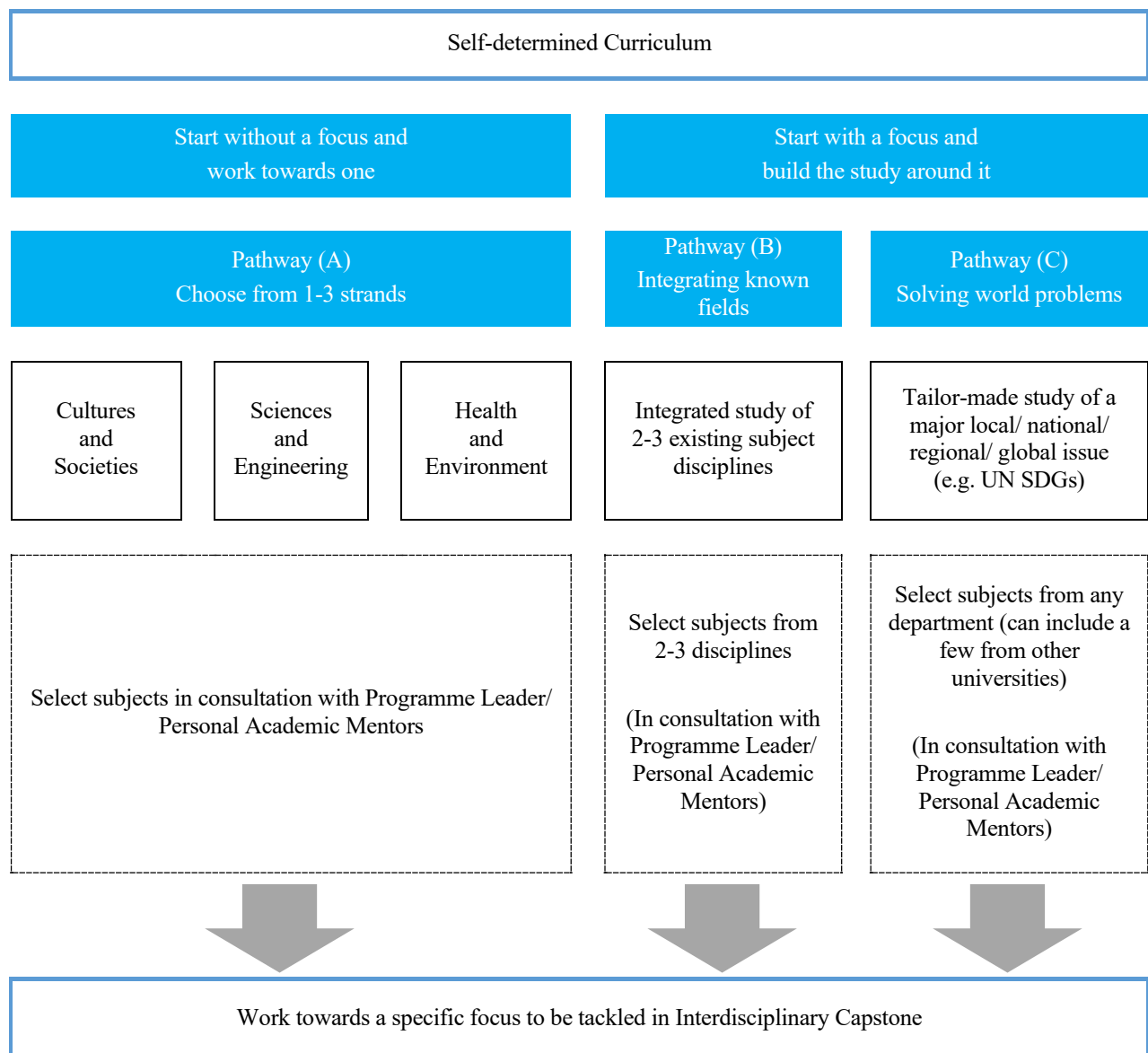
Minimum credit requirement for graduation	120 credits (with at least 50% at Level 3 or above)
Major (self-determined curriculum)	Minimum 54 credits
Including the following Interdisciplinary Core:	18 credits
(i) Introduction to Interdisciplinary Studies	(3)
(ii) Interdisciplinary Research Methods	(3)
(iii) Reflections on Contemporary Issues I/II	(6)
(iv) Interdisciplinary Capstone	(6)
Discipline-specific English Language Requirement	Minimum 2 credits
- General University Requirements (GUR) - Free Electives/ Minor - Internship (Work-Integrated Education)	27 credits Minimum 6 credits 3-6 training credits

For details, please refer to the below Tables 1 and 2.

Table 1: Programme curriculum for Undergraduate Programme (UG)

Interdisciplinary Core	Flexible Major	Common UG Core
CUS102 Introduction to Interdisciplinary Studies (3 credits) Students will learn about the idea of interdisciplinarity, explore the kinds of issue that require an inter-/trans-disciplinary approach to solve, and develop a personal development plan .	Self-determined curriculum (Minimum 54 credits including the Interdisciplinary Core) Build the curriculum following one of three pathways (See Table 2). Students will keep a learning portfolio to be submitted along with the capstone project.	GUR (27 credits)
CUS202 Interdisciplinary Research Methods (3 credits) Students will learn about a variety of research methods and start working towards a proposal for their capstone project.		
CUS201/301 Reflections on Contemporary Issues I/II (6 credits) Student-led forums in which local, national, regional and global issues of significance are discussed, with input from students, staff and external stakeholders. Students will write reflection assignments.		Internship (3-6 training credits) (Fulfil WIE requirement)
CUS401 Interdisciplinary Capstone (6 credits) An interdisciplinary project that addresses a local, national, regional and/or global issue of significance, with inter-sector partnership . In addition to the project report, students will write reflection assignments.		Free Electives (Minimum 6 credits)

Table 2: Self-determined curriculum of Major



4.1 Major (self-determined curriculum) (Minimum 54 credits)

a) Interdisciplinary core (18 credits)

	<u>Subject Code</u>	<u>Subject Title</u>	<u>Credits</u>
1.	CUS102*	Introduction to Interdisciplinary Studies	3
2.	CUS202	Interdisciplinary Research Methods	3
3.	CUS201/301	Reflections on Contemporary Issues I/II	6
4.	CUS401	Interdisciplinary Capstone	6

* Double-fulfilment Subject for CAR(N). Students are required to take an extra subject(s) to make up the credit requirements.

b) Self-determined curriculum

Pathway (A): Choose from 1-3 strands:

- Choose subjects from 1-3 strands: Cultures and Societies; Sciences and Engineering; and Health and Environment
- Subjects will be categorised by departments (those departments with * may include subjects that can be categorised under different strands):
 - Cultures and Societies: AF, APSS, CHC, ENGL, LST*, LMS, MM, SD, SFT, SHTM
 - Sciences and Engineering: AAE, AMA, BEEE*, BME*, CEE*, CHEM, CMI, COMP, DSAI, EEE, ISE, LS, ME, PM
 - Health and Environment: ARCH, BEEE*, BME*, CEE*, FSN, HTI, LSGS, RS, SN, SO
- The subjects offered by a department should normally belong to the same strand. However, a list of exception subjects will be prepared for departments' verification and confirmation.

Please refer to the [English-Chinese Glossary of Terms Commonly Used at PolyU](#) for details on the abbreviations used for faculties and academic departments.

Pathway (B): Self-determined curriculum: Start with a focus – focus on 2 to 3 disciplines

- Students are expected to select subjects integrating known fields by taking integrated study of 2-3 existing subject disciplines.

Pathway (C): Self-determined curriculum: Start with a focus – self-defined Major

- Students are expected to engage in tailor-made study of a Major.
- They should work towards solving local/ national/ regional/ global problems (e.g. UN SDGs).

Note: Students are expected to **confirm their focus** by the end of **Semester 1 of Year 2**. Alternatively, students may apply for a transfer to another Major offered by the University by the end of Semester 2 of Year 1 (the exact date to be confirmed by the Academic Registry), **subject to the approval by CUS and the transfer-in department/school**.

4.2 General University Requirements (GUR) (27 credits)

The General University Requirements are as follows:

(The Requirements are subject to the University's review and refinements, if any.)

Areas	Credits
Language & Communication Requirements (LCR) - AI as a Tool for Language Learning - English LCR Elective - Chinese LCR Elective	9 (3) (3) (3)
Cluster-Area Requirements (CAR) (M): Chinese History and Culture 3 credits each from two of the following three cluster areas in consultation with Programme Leader/ Personal Academic Mentors: (A): Human Nature, Relations and Development (D): Science, Technology and Environment (N): Cultures, Organisations, Societies and Globalisation and of which - Students must also fulfil the Reading and Writing requirements in English and Chinese	9 (3) (3) (3) (3)
Other Requirements - Leadership Education and Development (LEAD) - Service-Learning - Artificial Intelligence and Data Analytics requirement (AIDA) - Innovation and Entrepreneurship requirement (IE) - Healthy Lifestyle (non-credit bearing)	3 3 2 1 0
Total GUR credits	27

Please visit the CUS website to learn more about the [General University Requirements](#).

4.3 Free Electives (Minimum 6 credits)

Students are required to take at least 6 credits of free electives. Students may wish to consider making use of the 6 credits of free electives for pursuing a Minor. The credit requirement for a Minor is 18, at least 9 credits of which should be at Level 3 or above. Subject to approval by the Minor-offering department, students may count up to 6 credits from their Major/GUR (including LCR subjects at proficient level) towards their chosen Minor.

4.4 Internship (Work-Integrated Education) (3-6 training credits)

All UGC-funded full-time undergraduate degree programmes should include a mandatory work-integrated education (WIE) component. Mandatory WIE activities should be in alignment with PolyU's strategic goal of providing value-added education leading to the development of all-round students with professional competence.

WIE details are discussed in [Section 6](#).

5) INDICATIVE PROGRESSION PATTERN

The indicative progression pattern for the BDSIS is shown below.

- The progression pattern may vary according to the study focus of students.
- The maximum study load that a student can take in a semester is 21 credits.
- For students following the progression pattern specified for their study options, they have to take the number of credits and subjects as specified for each semester. Students cannot drop those subjects assigned by the College unless prior approval has been given by the College.
- **Students are not allowed to drop any subjects after the add/drop period. Applications for subject withdrawal after the add/drop period will only be considered if students have a genuine need with strong justifications and documentary evidence. Poor performance in mid-term tests / continuous assessments and heavy workload are not considered as valid reasons for subject withdrawal.**

Indicative Progression Pattern for BDSIS

The indicative progression pattern of Interdisciplinary Core and GUR subjects is provided in the table below.

Students should work with their Personal Academic Mentor to select appropriate Major subjects and free electives starting from the second semester of Year 1 so that they are well-prepared for their future interdisciplinary studies.

Year 1	Semester 1	CUS102 Introduction to Interdisciplinary Studies
		APSS1L01 Tomorrow's Leaders
		DSAI1202 Introduction to Artificial Intelligence and Data Analytics
		MM1031 Introduction to Innovation and Entrepreneurship
		LEI1101/LEI1102 AI as a Tool for Language Learning (AITLL)
		CAR 1 (CAR M)
		Healthy Lifestyle (non-credit bearing)
	Semester 2	English LCR Elective
		Chinese LCR Elective
		*Major subjects in consultation with the Personal Academic Mentors
Year 2	Semester 1	CUS202 Interdisciplinary Research Methods
		CAR 2
		*Major subjects in consultation with the Personal Academic Mentors
	Semester 2	CUS201 Reflections on Contemporary Issues I
		CAR 3
		Service-Learning
Year 3	Semester 1	CUS301 Reflections on Contemporary Issues II
		*Major subjects in consultation with the Personal Academic Mentors
	Semester 2	*Major subjects in consultation with the Personal Academic Mentors
Year 4	Semester 1	CUS401 Interdisciplinary Capstone
	Semester 2	*Major subjects in consultation with the Personal Academic Mentors

6) INTERNSHIP (WORK-INTEGRATED EDUCATION) #

Internship (3-6 training credits) is a mandatory component of the curriculum to fulfil the Work-Integrated Education (WIE) requirement. It is “work-based learning experiences which take place in an organisational context relevant to a student’s future profession, or the development of generic skills that will be valuable in that profession”. As an essential and compulsory component in the BDSIS curriculum, WIE facilitates the integration of knowledge, skills, and competences between the classroom and the real-world, thus equipping students with valuable work experience as well as practical readiness for full-time employment upon graduation.

Students are required to obtain a “Pass” in the subject upon graduation, i.e. successfully complete at least 100 hours of placement in one organization, depending on the credits of WIE.

The listed requirements and procedure for WIE in Section 6 are subject to review.

6.1 Intended Learning Outcomes of WIE

At the end of WIE, the student should be able to:

- a) apply discipline-related skills relevant to their chosen field in real world settings, and identify issues, evaluate options, and make informed decisions within professional contexts (discipline-related and may vary across programmes);
- b) communicate effectively, both oral and written, within professional settings;
- c) demonstrate ethical behavior, integrity, and professionalism by adhering to professional codes of conduct, exhibiting reliability, and upholding ethical standards in their interactions with colleagues and stakeholder;
- d) possess teamwork skills in cooperation and collaboration in multidisciplinary teams, and the ability to build professional networks and relationships; and
- e) take initiative in setting goals, prioritising responsibilities, and taking ownership of their professional development and self-management.

6.2 WIE Requirements

- 6.2.1 Students must acquire at least 3-6 training credits and are highly recommended to complete the requirement before promotion to the final year of study.
- 6.2.2 Students may choose to fulfil the minimum hour requirement through placement in one organization.
- 6.2.3 All work for WIE credits must be structured and measurable, where structured means that objectives are set for the work experience before it begins and measurable means that the attainment of those objectives is monitored and attested to by a person other than the student, usually the internship mentor at the organization where the work is done.
- 6.2.4 Any jobs in an external organization and deemed suitable by the College and Personal Academic Mentor can meet the WIE requirement. Such jobs must be declared by students in advance, so the College has an opportunity to assess their suitability.
- 6.2.5 WIE credits can be achieved through full-time, part-time, or project work done locally or overseas.
- 6.2.6 In general, it is recommended that students start their WIE internships after two years of studies.

6.3 WIE Assessments

6.3.1 Assessment of WIE will be on a pass/fail basis upon:

- a) An initial statement from the student on the objectives and duration of the work; and
- b) A statement from the student's employer(s) confirming the duration of the work and satisfactory performance; and
- c) A Self-Evaluation/Reflection by the student.
- d) Assessment of the Personal Academic Mentor

These four requirements need to be met for every WIE attachment.

7) CURRICULUM MAPPING WITH PROGRAMME LEARNING OUTCOMES

The indication of how each intended learning outcomes of the BDSIS is addressed by the Interdisciplinary Core subjects is provided below:

Subject Code & Title	Intended Learning Outcomes (ILOs) of BDSIS				
	(i)	(ii)	(iii)	(iv)	(v)
CUS102 Introduction to Interdisciplinary Studies	✓	✓	✓		✓
CUS202 Interdisciplinary Research Methods	✓	✓			
CUS201 Reflections on Contemporary Issues I	✓	✓	✓	✓	
CUS301 Reflections on Contemporary Issues II	✓	✓	✓	✓	
CUS401 Interdisciplinary Capstone	✓	✓	✓	✓	✓

Keys to Programme ILOs

- (i) Examine real-world issues from an interdisciplinary perspective, evaluate information critically and synthesise different viewpoints to form a holistic understanding.
- (ii) Integrate and apply in-depth knowledge and modes of thinking from two or more disciplines to develop innovative and entrepreneurial solutions to complex local, national and/or global challenges.
- (iii) Demonstrate readiness to lead with integrity, pride, professionalism and commitment in specific areas of sustainable development and engage in initiatives for creating a sustainable future for the benefit of society.
- (iv) Communicate and collaborate effectively with people from different disciplines and sectors with sensitivity and understanding.
- (v) Commit to lifelong learning, plan their studies purposefully and adapt effectively to different learning situations and challenging circumstances.

8) EXAMINATION AND ASSESSMENT

This Scheme and all study options are governed by the University's General Assessment Regulations (GAR). Please refer to "General Assessment Regulations" in the [Handbook on Academic Regulations for Taught Programmes](#) for details. Please refer to the "Assessment" in the [Student Handbook for Taught Programmes](#). Programme-specific assessment regulations are further set out here.

8.1 Assessment Methods

- a) Students' performance in a subject shall be assessed by continuous assessment and/or examinations as deemed appropriate. Where both methods are used, the weighting of each in the overall subject grade is stated in the Programme Requirement Document.
- b) At the beginning of each semester, the subject teacher should inform students of the details of the methods of assessments to be used within the assessment framework as specified in the Programme Requirement Document.

8.2 Progression and De-registration

- 8.2.1 The Board of Examiners shall, at the end of each semester (except for Summer Term unless there are students who are eligible to graduate after completion of Summer Term subjects or the Summer Term study is mandatory for the programme), determine whether each student is:
 - (i) eligible for progression towards an award; or
 - (ii) eligible for an award; or
 - (iii) required to be de-registered from the programme.
- 8.2.2 When a student has a Grade Point Average (GPA) lower than 1.70, he/she will be put on academic probation in the following semester. If a student is able to pull his/her GPA up to 1.70 or above at the end of the semester, the status of "academic probation" will be lifted. The status of "academic probation" will be reflected in the assessment result notification but not in the transcript of studies.
- 8.2.3 A student will normally have "progressing" status unless he/she falls within any one of the following categories, which shall be regarded as grounds for deregistration from the programme:
 - (i) the student has reached the final year of the normal period of registration for that programme, as specified in the Programme Requirement Document, unless approval has been given for extension; or
 - (ii) the student has reached the maximum number of retakes (i.e. two times) allowed for a failed compulsory subject; or
 - (iii) the student's GPA is lower than 1.70 for two consecutive semesters and his/her Semester GPA in the second semester is also below 1.70; or
 - (iv) the student's GPA is lower than 1.70 for three consecutive semesters.
- 8.2.4 When a student falls within any of the categories as stipulated above, except for category (i) with approval for extension, the Board of Examiners shall de-register the student from the programme without exception.
- 8.2.5 A student may be de-registered from the programme enrolled before the time frame specified in Sections 8.2.3 (iii) or 8.2.3 (iv) above if his/her academic performance is poor to the extent that the Board of Examiners deems that his/her chance of attaining a GPA of 1.70 at the end of the programme is slim or impossible.

- 8.2.6 Summer Term is not mandatory for students of the programme, the progression of students to the following academic year will not be affected by the GPA obtained in the Summer Term.
- 8.2.7 If the student is not satisfied with the de-registration decision of the Board of Examiners, he/she can lodge an appeal. All such appeal cases will be referred directly to the Academic Appeals Committee (AAC) for final decision. Views of Faculties/Schools/Departments will be sought and made available to AAC for reference.

8.3 Retaking of Subjects

- 8.3.1 Students may only retake a subject which they have failed (i.e. Grade F or S or U). Retaking of subjects is with the condition that the maximum study load of 21 credits per semester is not exceeded.
- 8.3.2 The number of retakes of a subject should be restricted to two, i.e. a maximum of three attempts for each subject is allowed.
- 8.3.3 In cases where a student takes another subject to replace a failed elective subject, the fail grade will be taken into account in the calculation of the GPA, despite the passing of the replacement subject. Likewise, undergraduate students who fail a Cluster Area Requirement (CAR) subject may need to take another subject from the same Cluster Area in order to fulfill this part of the GUR, since the original CAR subject may not be offered; in such cases, the fail grade for the first CAR subject will be taken into account in the calculation of the GPA, despite the passing of the second CAR subject.
- 8.3.4 Students need to submit a request to the College Board for the second retake of a failed subject.
- 8.3.5 Students who have failed a compulsory subject after two retakes and have been de-registered can submit an appeal to the Academic Appeals Committee (AAC) for a third chance of retaking the subject.
- 8.3.6 In relation to 8.3.5 above, in case AAC does not approve further retakes of a failed compulsory subject or the taking of an equivalent subject with special approval from the Faculty, the student concerned would be de-registered and the decision of the AAC shall be final within the University.

8.4 Guidelines for Award Classification

- a) The guidelines for award classification are set out in this section. In using these guidelines, the Board of Examiners shall exercise its judgement in coming to its conclusions as to the award for each student, and where appropriate, may use other relevant information.
- b) The Weighted GPA will be used as a guide for helping to determine award classifications. Weighted GPA will be computed as follows:

$$\text{Weighted GPA} = \frac{\sum_{n=1}^N \text{Subject Grade Point}_n \times \text{Subject Credit Value}_n \times W_n}{\sum_{n=1}^N \text{Subject Credit Value}_n \times W_n}$$

where W_n = weighting to be assigned according to the level of the subject

N = number of all subjects (inclusive of failed subjects) taken up by the student up to and including the latest semester/term. For subjects which have been retaken, only the grade point obtained in the final attempt will be included in the GPA calculation

8.5 University Graduation Requirements

To be eligible for a Bachelor's Degree award under the 4-year full-time undergraduate curriculum, a student must:

1. Complete successfully the requisite number of credits as defined in Section 4.
2. Earn a cumulative GPA of 1.70 or above at graduation.
3. Complete successfully the mandatory Work-Integrated Education (WIE) component.
4. Satisfy the residential requirement for at least one-third of the normal credit requirement for the award unless the professional bodies concerned stipulate otherwise.
5. Satisfy any other requirements as specified in the Programme Requirement Document.
6. Satisfy the General University Requirements (GUR).

8.6 Student Appeals against Examination Results

Appeal may lead to a change in the subject grade, which may go upward as well as downward, upon completion of reviewing the appeal case.

9) PROGRAMME OPERATION AND MANAGEMENT

9.1 College Undergraduate Programme Committee

The College Undergraduate Programme Committee will exercise the overall academic and operational responsibility for the Programme.

9.2 Programme Executive Group

The day-to-day operation of the Programme will be carried out by the Programme Executive Group, which consists of the Programme Leader and Deputy Programme Leader. The Group will report the operation back to the College Undergraduate Programme Committee.

9.3 Student-Staff Consultative Group

The Student-Staff Consultative Group consists of Student Representatives together with the Programme Leader. The Committee is normally chaired by the Programme Leader and meets at least twice a year. Issues to be kept under consideration include: student workload, teaching methods, balance between subject areas, training matter and other areas of mutual concern.

9.4 Academic Advising

Academic advising at PolyU aims to help students to make informed and intelligent academic decisions/choices about their study at PolyU that suit their intellectual, professional and personal goals. It is instrumental to promoting student success, and plays a vital role in enhancing students' overall learning experience at PolyU. The specific objectives are:

- To build up an early connection between the students and their home departments, and to promote their sense of affiliation to the department and the University,
- To provide students with accurate information about the academic regulations and requirements regarding their Major/programme, as well as the GUR,
- To assist students to explore their interests, abilities and values on academic pursuits, and formulate appropriate intellectual, professional and personal goals,
- To provide advice and guidance to students that enables them to develop and pursue a study plan for their 4 years of study appropriate for meeting their intellectual, professional and personal goals,
- To connect students to resources, opportunities and support within and outside the University to enhance their educational experiences and success.

9.5 Operation of Academic Advising in College

CUS has introduced a four-tier academic advising system, as illustrated below, to support our BDSIS students throughout their study journey.

Four-tier Academic Advising System	Dean of the College of Undergraduate Studies	Personal Academic Mentors (PAMs)
	BDSIS Programme Leader	Undergraduate Studies Support (USS) Team

Under the Dual Personal Academic Mentor (PAM) System, each student is matched with two mentors:

- Primary PAM - An internationally leading scholar who guides the student in navigating their study path, academic development, research and future career aspirations.
- Secondary PAM - Either a leading academic scholar similar to the primary PAM or a leader with outstanding professional and practical expertise, who provides guidance on practical and discipline-specific issues.

Please visit the CUS website to learn more about our [PAMs](#). Colleagues from the Undergraduate Studies Support (USS) Team of CUS will notify you of your assigned PAMs in early September. You are expected to attend all academic advising sessions punctually, and take the initiative to share and discuss your study plan and career aspirations with your PAMs.

9.6 Roles and Responsibilities of Academic Advisees

Students/Academic Advisees are expected to:

- a) Take personal responsibility for their academic decisions, plans and outcomes.
- b) Be familiar with the academic advising policies, resources and infrastructure at PolyU.
- c) Understand their Major/Minor requirements and the General University Requirements, and monitor their own progress with reference to the graduation requirements.
- d) Develop study plans which enable them to complete their undergraduate degrees at PolyU.
- e) Attend academic advising sessions offered by the College.
- f) Be prepared for academic advising. Understand their academic progress before meeting their Personal Academic Mentors.
- g) If they have any questions regarding their academic studies, they should raise them at the academic advising meetings.
- h) Have an open mind and be ready to seriously consider advice given by teachers, Personal Academic Mentors and other staff.
- i) Read the e-mails and letters sent to them by their Personal Academic Mentors.
- j) Visit the College's academic advising website and the website of the Student Affairs Office (SAO) at least once a semester for updates and new information.
- k) Seek help as early as possible. It is a sign of courage.
- l) Enjoy their academic advising experience at PolyU.

9.7 Useful Links

Website of Student Affairs Office (SAO):

<https://www.polyu.edu.hk/sao/>

10) CODE OF CONDUCT FOR STUDENTS

The University Student Handbook contains a comprehensive section on Academic Integrity which every student should be aware of. In particular, every student should read, and act on, the sections related to plagiarism and bibliographic referencing.

10.1 Academic Dishonesty

- 10.1.1 Plagiarism refers to the act of using the creative works of others (e.g. ideas, words, images or sound, etc.) in one's own work without proper acknowledgement of the sources.
- 10.1.2 Students should refrain from committing any acts of plagiarism, including but not limited to the following:
- Copying work (part or whole) which has been submitted earlier for another assessment/assignment and submitting it as one's own and one's original. This applies to both copying your own work (without permission from your subject teacher/your Department), and copying the work of others (including GenAI)/translating the work of theirs (including GenAI) without permission from your subject teacher
 - Using ideas, words, or other forms of works produced by other people or Generative AI in one's own work without proper citation and/or acknowledgement of the source
 - Submitting the same paper (or a significant portion of it) for credit in more than one subject
- 10.1.3 Students are required to submit their original work and avoid any possible suggestion of plagiarism in the work they submit for grading or credit.
- 10.1.4 The University views plagiarism, whether committed intentionally or because of ignorance or negligence, as a serious disciplinary offence. Excuses such as "not knowing that this is required" or "not knowing how to do it" are not accepted.
- 10.1.5 Depending on the seriousness of the plagiarism cases, they may be referred to the Student Discipline Committee for investigation and decision. If a student is found guilty of the alleged offence, penalties considered appropriate by the Committee may be imposed. These may include:
- awarding a fail grade to the component / subject concerned;
 - putting the student on disciplinary probation; and
 - any other penalties as considered appropriate.

10.2 Use of PolyU E-mail Account

- 10.2.1 E-mail is an official communication channel among staff and students at PolyU. Students are strongly advised to check their PolyU student e-mails regularly. Missing important information contained in e-mails intentionally or unintentionally will not be accepted as a legitimate reason for their appeal against academic assessments.
- 10.2.2 Students should not use PolyU student e-mails in any ways which violate applicable laws and regulations, including but not limited to:
- Conducting commercial functions, such as marketing or business transactions
 - Sending irrelevant or chain mails to a large number of recipients
 - Broadcasting messages which are likely to harass or offend other users
 - Any communication which violates applicable laws and regulations.

- 10.2.3 Users should also observe that proper and courteous language should be used in e-mails, and sending e-mails in the name of another person and / or anonymous e-mail is unacceptable. The University's e-mail address lists are for internal use and may not be distributed to external entities for purpose of mass mailing.

The learning and teaching platforms of The Hong Kong Polytechnic University ("PolyU") are for the use of PolyU students to facilitate their learning. The student shall use the platforms and the materials available (including teaching sessions conducted by staff of PolyU) for their personal study only. Where a student needs to download or save the materials available on the platforms for the permitted purposes, the student shall take all necessary measures to prevent their access by other parties. The materials are copyright protected. Save for the permitted purposes, no copying, distribution, transmission or publication of the materials in whole or in part in any form is permitted.

Programme Learning Outcomes Assessment Plan (P-LOAP)

Department/Faculty: College of Undergraduate Studies

Name of Programme: Bachelor's Degree Scheme in Interdisciplinary Studies (BDSIS)

Programme Mission/Goals:

The programme aims to provide a unique educational opportunity for top-performing undergraduate students, offering them flexible learning pathways and curriculum options, personalised coaching, and in-depth mentorship. This initiative is designed to nurture and support academically outstanding students, allowing them to excel in their academic pursuits with a free option across disciplines and guaranteed outside-classroom and non-local learning opportunities. It also serves to inspire students to adopt an innovative, interest-driven and inspiring approach in their academic journey.

Part I: Programme learning outcomes assessment methods and procedures

Programme intended learning outcomes	LOA methods and measures	How the data will be collected	Criteria for success	How the data will be disseminated and used for improvement
1. Examine real-world issues from an interdisciplinary perspective, evaluate information critically and synthesise different viewpoints to form a holistic understanding.	a) Ratings of the pertinent learning outcome within the assessment method "Portfolio" in <i>CUS102 Introduction to Interdisciplinary Studies</i> b) Ratings of the pertinent learning outcome within the assessment method "Report" in <i>CUS202 Interdisciplinary Research Methods</i> c) Ratings of the pertinent learning outcome within the assessment method "Case Study" in:	Assessment by Subject Lecturer and/or Project Mentor using assessment component(s) specified in the Programme Requirement Document (PRD)	Expected 80% of students achieving the results of grade 'C' or above and thereby being rated "satisfactory" or above.	Results to be summarised in the Annual Programme Report for review/assessment of programme outcomes, which will be sent to the Dean and College Board. Results to be reviewed by the Dean and feedback being discussed in the Programme Committee each year to identify

	<i>CUS201/301 Reflections on Contemporary Issues I/II</i> d) Ratings of the pertinent learning outcome within the assessment method “Proposal” and “Final Report” in: <i>CUS401 Interdisciplinary Capstone</i>			areas for improvement. Outcome assessment results and improvement plan to be reported in the annual Departmental Annual Operation Plan for overseeing SME and PolyU QAC(AD)’s endorsement and scrutiny.
	e) Specific item(s) in surveys to collect feedback at the end of each academic year	To be organised by the Programme Leader and supported by the General Office.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	f) Relevant items in the Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	To be conducted by EDC.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	g) Employment Survey	The Survey Assessment will be conducted 12 months after the graduation of the first cohort of students, and will continue in the following years with graduates.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
2. Integrate and apply in-depth knowledge and modes of thinking from two or more disciplines to develop innovative and entrepreneurial solutions to complex local, national and/or global challenges.	a) Ratings of the pertinent learning outcome within the assessment method “Portfolio” in <i>CUS102 Introduction to Interdisciplinary Studies</i> b) Ratings of the pertinent learning outcome within the assessment method “Report” in <i>CUS202 Interdisciplinary Research Methods</i>	Assessment by Subject Lecturer and/or Project Mentor using assessment component(s) specified in the Programme Requirement Document (PRD)	Expected 80% of students achieving the results of grade ‘C’ or above and thereby being rated “satisfactory”.	

	c) Ratings of the pertinent learning outcome within the assessment method “Case Study” in: <i>CUS201/301 Reflections on Contemporary Issues I/II</i> d) Ratings of the pertinent learning outcome within the assessment method “Proposal” and “Final Report” in: <i>CUS401 Interdisciplinary Capstone</i>			
	e) Specific item(s) in surveys to collect feedback at the end of each academic year	To be organised by the Programme Leader and supported by the General Office.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	f) Relevant items in the Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	To be conducted by EDC.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	g) Employment Survey	The Survey Assessment will be conducted 12 months after the graduation of the first cohort of students, and will continue in the following years with graduates.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
3. Demonstrate readiness to lead with integrity, pride, professionalism and commitment in specific areas of sustainable development and engage in initiatives for creating a	a) Ratings of the pertinent learning outcome within the assessment method “Portfolio” in <i>CUS102 Introduction to Interdisciplinary Studies</i>	Assessment by Subject Lecturer and/or Project Mentor using assessment component(s) specified in the Programme Requirement Document (PRD)	Expected 80% of students achieving the results of grade ‘C’ or above and thereby being rated “satisfactory” or above.	

sustainable future for the benefit of society.	b) Ratings of the pertinent learning outcome within the assessment method “Case Study” in: <i>CUS201/301 Reflections on Contemporary Issues I/II</i> c) Ratings of the pertinent learning outcome within the assessment method “Proposal” and “Final Report” in: <i>CUS401 Interdisciplinary Capstone</i>			
	d) Specific item(s) in surveys to collect feedback at the end of each academic year	To be organised by the Programme Leader and supported by the General Office.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	e) Relevant items in the Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	To be conducted by EDC.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	f) Employment Survey	The Survey Assessment will be conducted 12 months after the graduation of the first cohort of students, and will continue in the following years with graduates.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
4. Communicate and collaborate effectively with people from different disciplines and sectors with sensitivity and understanding.	a) Ratings of the pertinent learning outcome within the assessment method “Presentations” (CUS201) and “Project” (CUS301) in: <i>CUS201/301 Reflections on Contemporary Issues I/II</i>	Assessment by Subject Lecturer and/or Project Mentor using assessment component(s) specified in the Programme Requirement Document (PRD)	Expected 80% of students achieving the results of grade ‘C’ or above and thereby being rated “satisfactory” or above.	

	b) Ratings of the pertinent learning outcome within the assessment method “Proposal” and “Final Report” in: <i>CUS401 Interdisciplinary Capstone</i>			
	c) Specific item(s) in surveys to collect feedback at the end of each academic year	To be organised by the Programme Leader and supported by the General Office.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale. Based on the feedback to finetune the programme.	
	d) Relevant items in the Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	To be conducted by EDC.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	e) Employment Survey	The Survey Assessment will be conducted 12 months after the graduation of the first cohort of students, and will continue in the following years with graduates.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
5. Commit to lifelong learning, plan their studies purposefully and adapt effectively to different learning situations and challenging circumstances.	a) Ratings of the pertinent learning outcome within the assessment method “Portfolio” in <i>CUS102 Introduction to Interdisciplinary Studies</i>	Assessment by Subject Lecturer and/or Project Mentor using assessment component(s) specified in the Programme Requirement Document (PRD)	Expected 80% of students achieving the results of grade ‘C’ or above and thereby being rated “satisfactory” or above.	
	b) Ratings of the pertinent learning outcome within the assessment method “Proposal” and “Final Report” in: <i>CUS401 Interdisciplinary Capstone</i>			

	c) Specific item(s) in surveys to collect feedback at the end of each academic year	To be organised by the Programme Leader and supported by the General Office.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale. Based on the feedback to finetune the programme.	
	d) Relevant items in the Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	To be conducted by EDC.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	
	e) Employment Survey	The Survey Assessment will be conducted 12 months after the graduation of the first cohort of students, and will continue in the following years with graduates.	Expected 80% of the graduate respondents giving ratings of 3 or above on the 5-point scale.	

Part II: Implementation schedule and responsibility

LOA methods or activities	Implementation schedule				Person(s) responsible
	2025/26	2026/27	2027/28	2028/29	
1. Subject embedded assessments					Subject Leaders
a) CUS102 Introduction to Interdisciplinary Studies	√	√			
b) CUS202 Interdisciplinary Research Methods		√	√		
c) CUS201 Reflections on Contemporary Issues I		√	√		
d) CUS301 Reflections on Contemporary Issues II			√	√	
e) CUS401 Interdisciplinary Capstone				√	
2. WIE			√	√	Programme Leader and Coaches of students
3. Evaluation Reports from DAA	√	√	√	√	The Dean and Programme Leader
4. Surveys to collect feedback	At the end of each academic year				Programme Leader
5. Institutional Surveys on Learning Experience (ISLE) - Final Year (FY)	The survey assessment will be conducted with the first cohort of graduates to evaluate their learning experience. The survey will continue in the following years with graduates.				Programme Leader
6. Employment Survey					

Submitted by: Prof. Daniel SHEK (Name)

Date 28 April 2025

AVP(UP) and Dean(US) (Post)

PART B SYLLABI

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	APSS1L01			
Subject Title	Tomorrow's Leaders			
Credit Value	3			
Level	1			
GUR Requirements Intended to Fulfill	This subject intends to fulfill the following requirement(s): ☐ Healthy Lifestyle ☐ AI and Data Analytics (AIDA) Innovation and Entrepreneurship (IE) ☐ Languages and Communication Requirement (LCR) ☒ Leadership Education and Development (LEAD) ☐ Service-Learning ☐ Cluster-Area Requirement (CAR) ☐ Human Nature, Relations and Development [CAR A] ☐ Science, Technology and Environment [CAR D] ☐ Chinese History and Culture [CAR M] ☐ Cultures, Organizations, Societies and Globalization [CAR N] ☐ China-Study Requirement ☐ Yes or ☐ No ☐ Writing and Reading Requirements ☐ English or ☐ Chinese			
Pre-requisite / Co-requisite/ Exclusion	Nil			
Assessment Methods	100% Continuous Assessment	Individual Assessment	Group Assessment	
	1. Class Participation (including 5% "Learning to learn" self-reflection)	20%	--	
	2. Group Project	--	30%	
	3. Term Paper	50%	--	
	4. Online Academic Integrity Tutorial Test	Compulsory Pass Requirement		

	<table><tr><td>5. Law Abiding- Leadership Test</td><td>Compulsory Pass Requirement</td><td></td></tr></table> • The grade is calculated according to the percentage assigned; • The completion and submission of all component assignments are required for passing the subject; and • Student must pass all component(s) if he/she is to pass the subject.	5. Law Abiding- Leadership Test	Compulsory Pass Requirement	
5. Law Abiding- Leadership Test	Compulsory Pass Requirement			
Objectives	The course is designed to enable students to learn and integrate theories, research and concepts of the basic personal qualities (particularly intrapersonal and interpersonal qualities) of effective leaders. This subject also intends to help students develop and reflect on their intrapersonal qualities, interpersonal qualities and connection of learning to oneself. Finally, the subject cultivates students’ appreciation of the importance of intrapersonal and interpersonal qualities in effective leadership.			
Intended Learning Outcomes (Note 1)	Upon completion of the subject, students will be able to: a. understand and integrate theories, research and concepts on the basic qualities (particularly intrapersonal and interpersonal qualities) of effective leaders; b. develop self-awareness and self-understanding; c. demonstrate self-leadership in pursuit of continual self-improvement; d. apply intrapersonal and interpersonal skills in daily lives; e. appreciate the importance of intrapersonal and interpersonal qualities in effective leadership, particularly the connection of learning in the subject to one’s professional development and personal growth; f. recognize and accept their responsibility as professionals and citizens to the society and the world.			
Subject Synopsis/ Indicative Syllabus (Note 2)	1. An overview of the personal attributes of effective leaders: roles of intrapersonal and interpersonal qualities in effective leadership and university graduates’ employability in the service economy; compulsory requirements of the subject: “Learning to learn” assessment; Online Tutorial on Academic Integrity; law abiding-leadership assessment; group presentation; individual assignment; class participation. 2. Self-leadership in effective leaders: the importance of self-understanding and self-management; “Learning to learn” ability; life-long learning and leadership. 3. Cognitive competence (critical thinking): misinformation, disinformation, and propaganda; different types of thinking styles; critical thinking model; roles of cognitive competence, critical thinking and problem solving in effective leadership; learning to learn. 4. Social emotional competence: social awareness; relationship management; the application of social emotional competence in daily lives and in effective leadership.			

	5. Resilience and stress-coping: concepts and theories of resilience and stress-coping; relationship between resilience, stress and stress-coping; role of resilience in effective leadership; application of resilience and stress-coping on a daily basis. 6. Morality and integrity: moral competence; role of morality in effective leadership; ethical leadership; importance of moral competence in different professions, academic integrity in university students (online tutorial on academic integrity). 7. Spirituality: connectedness to others, personal beliefs and values, meaning of life, spirituality and professional development, role of spirituality in effective leadership; spiritual practices in daily lives. 8. Law-abidance as a quality of leadership: basic concepts and theories related to law-abiding leadership and socially responsible leadership; importance of law-abiding leadership and socially responsible leadership to professionals and the general public; basic knowledge on national security and the Hong Kong; Hong Kong National Security Law; a brief overview of modern Chinese history, the Constitution, and the Basic Law. 9. Cultural competence and global citizenship: cultural competence in a globalized world; global citizenship and effective leadership; responsibilities of university students as both professionals and citizens of the society. 10. Effective communication: basic communication skills; importance of effective communication to daily life and leadership; care and compassion in effective leadership. 11. Team building: theories, concepts, skills and blocks of team building; role of team building in effective leadership; application of team building in different professions and daily lives. Note: For the topic on law abidance and the Hong Kong National Security Law, students are required to pass an online assessment with multiple-choice questions. Students can take the assessment with multiple attempts. The assessment does not carry any mark.
Teaching/Learning Methodology (Note 3)	Students taking this course are expected to be sensitive to their own behavior in intrapersonal and interpersonal contexts. Intellectual thinking, reflective learning, experiential learning and collaborative learning are emphasized in the course. Case studies on successful and fallen leaders will also be covered in the course. The teaching/learning methodology includes: 1. Lectures (including e-learning modules); 2. Experiential classroom activities; 3. Group project presentation; 4. Written assignment.

Assessment Methods in Alignment with Intended Learning Outcomes

(Note 4)

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d	e	f
1. Class Participation (including 5% “Learning to learn” self-reflection) ^	20%	✓	✓	✓	✓	✓	✓
2. Group Project*	30%	✓	✓	✓	✓	✓	✓
3. Term Paper^	50%	✓	✓	✓		✓	
4. Academic integrity online module and assessment^	0%	✓			✓	✓	
5. Quiz on law abidance and Hong Kong National Security Law^	0%	✓	✓	✓	✓	✓	✓
Total	100 %						

*assessment is based on group effort

^assessment is based on individual effort

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

1. Assessment of Class Participation (20%): It is expected that both online and classroom activities, and preparation for lectures can help students understand the subject matter and oneself, develop social skills, connect learning to oneself and promote an appreciation of the importance of intrapersonal and interpersonal leadership qualities. Hence, marks for class participation (including the participation in e-learning modules) and preparation for lectures will be given. Students will be assessed by: a) preparation for class (e.g. complete e-learning modules, online assignment, and dig up materials before class), b) participation in class and online learning activities (e.g. completion of worksheets and sharing in class, participation in online discussion forum) and c) volunteering to answer questions and join discussions. Also, students will be invited to rate the performance and learning of other group members in an honest and authentic manner. The marks will reflect the mastery of knowledge, self-reflection and quality of interpersonal skills (such as collaboration with other members and contribution to the group) of the group members.

Peer assessment will contribute to marks in class participation.

	As the university strategic priority, “Learning to learn” has the aim to support the development of students’ ability to engage in the learning process, manage their own learning, and take their learning to a higher level. “Learning to learn” concept will be covered in the lectures and students are required to develop a personal development plan at the beginning of the course. To encourage students to reflect on their experience in achieving their learning goals set in the development plan, students are required to reflect on their learning to learn ability and related learning experience in a reflective journal (5%). 2. <u>Assessment of Group Project (30%)</u>: Group project presentation can give an indication of the students’ understanding and integration of theories and concepts on the personal qualities in effective leadership, personal and group reflections, interpersonal skills and degree of recognition of the importance of active pursuit of knowledge covered in the course. 3. <u>Assessment of Term Paper (50%)</u>: Individual paper can give an indication of the students’ understanding and integration of theories and concepts on the personal qualities in effective leadership, self-assessment, self-reflection, connection of the subject matter to oneself and degree of recognition of the importance of active pursuit of knowledge covered in the course. 4. <u>Quiz on Law Abidance and Hong Kong National Security Law (0%)</u>: As universities have the obligation to conduct education on the Constitution, Basic Law and Hong Kong National Security Law, students are required to take a 3-hour face-to-face lecture on law abiding leadership and 7 hours of self-study. Based on the related materials on modern Chinese history, the Constitution, the Basic Law, restoration of Hong Kong to mainland China, national security and the Hong Kong National Security Law, students have to take an assessment with 20 multiple choice questions. Students can pass the assessment if he/she has correct answers on at least 16 questions (multiple attempts allowed). A student will fail in this subject if he/she cannot pass this assessment component. 5. <u>Academic Integrity Online Module and Assessment (0%)</u>: As academic integrity is very important for university students, students are required to take an online Academic Integrity program lasting for two hours. First, students are required to take a multiple-choice test with 10 questions in the pre-test without a passing mark (multiple attempts allowed). After that, students need to study four online modules to understand the concepts of academic integrity and ways to avoid academic dishonesty. Finally, students are required to take another multiple-choice test with 20 questions in the post-test with a passing benchmark of 15 questions (multiple attempts allowed). A student will fail in this subject if he/she cannot pass this assessment component. They must complete this
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	component by the 5th week of the semester. Based on the implementation of this subject in the past ten academic years (2012-2022), evaluation findings consistently showed that this subject was able to achieve the intended learning outcomes in the students. The positive evaluation findings are documented as follows: Leung, H. (2016). Levels of reflection on teaching a leadership and positive youth development subject. <i>International Journal on Disability and Human Development</i>, 15(2), 211–220. Leung, H., Shek, D. T. L., & Mok, B. P. W. (2016). Post-lecture subjective outcome evaluation of a university subject on leadership and intrapersonal development. <i>International Journal of Child and Adolescence Health</i>, 9(2), 223–234. Li, X., & Shek, D. T. L. (2020). Objective outcome evaluation of a leadership course utilising the positive youth development approach in Hong Kong. <i>Assessment & Evaluation in Higher Education</i>, 45(5), 741–757. Ma, C. M. S., Shek, D. T. L., & Li, P. P. K. (2017). Evaluation of a leadership and intrapersonal development subject for university students: Experience in Hong Kong. <i>International Journal of Child and Adolescent Health</i>, 10(3), 337–346. Ma, C. M. S., Shek, D. T. L., Li, P. P. K., Mok, B. P. W. & Leung, E. Y. K. (2016). Qualitative evaluation of a leadership and intrapersonal development subject for university students in Hong Kong. <i>International Journal of Child and Adolescent Health</i>, 9(2), 217–224. Shek, D. T. L. (2012). Development of a positive youth development subject in a university context in Hong Kong. <i>International Journal on Disability and Human Development</i>, 11(3), 173–179. Shek, D. T. L. (2013). Promotion of holistic development in university students: A credit-bearing subject on leadership and intrapersonal development. <i>Best Practices in Mental Health</i>, 9(1), 47–61. Shek, D. T. L., Fok, H. K., Leung, C. T. L., & Li, P. P. K. (2016). Qualitative evaluation of a credit-bearing leadership subject in Hong Kong. <i>International Journal of Child and Adolescent Health</i>, 9(2), 173–183. Shek, D. T. L., & Leung, J. T. Y. (2014) Perceived benefits of a university subject on leadership and intrapersonal development. <i>International Journal on Disability and Human Development</i>. 13(4), 481–488. Shek, D. T. L., & Ma, C. M. S. (2014). Do university students change after taking a subject on leadership and intrapersonal development? <i>International Journal on Disability and Human Development</i>, 13(4), 451–456. Shek, D. T. L., Sun, R. C. F., Tsien-Wong, T. B. K., Cheng, C. T., & Yim H. Y. (2013). Objective outcome evaluation of a leadership and intrapersonal development subject for university students. <i>International Journal on Disability and Human Development</i>, 12(2), 221–227. Shek, D. T. L., & Wu, F. K. Y. (2014). The role of teachers in youth development: Reflections of students. <i>International Journal on Disability and Human Development</i>, 13(4), 473–480. Shek, D. T. L., Wu, F. K. Y., Leung, C. T. L., Fok, H. K., & Li, P. P. K.
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	(2016). Focus group evaluation of a subject on leadership and intrapersonal development in Hong Kong. <i>International Journal of Child and Adolescent Health</i>, 9(2), 185–194. Shek, D. T. L., & Yu, L. (2014). Post-course subjective outcome evaluation of a subject on leadership and intrapersonal development for university students in Hong Kong. <i>International Journal on Disability and Human Development</i>, 13(4), 457–464. Shek, D. T. L., & Yu, L. (2016). Student feedback on a subject on leadership and intrapersonal development for university students in Hong Kong. <i>International Journal on Disability and Human Development</i>, 15(3), 339–345 Shek, D. T. L., & Yu, L. (2017). An evaluation study on a university general education subject in Hong Kong. <i>International Journal of Adolescent Medicine and Health</i>, 29(1), 103–109. Shek, D. T. L., Yu, L., Lin, L., Li, X., Zhu, X., Dou, D., Chai, W., Chak, Y., Ho, W., Leung, E., Li, P., Mok, B., Shek, V., Shek, E., & Jin, T. (2021). Nurturing leadership qualities under COVID-19: Student perceptions of the qualities and effectiveness of online teaching and learning on leadership development. <i>International Journal of Child and Adolescent Health</i>, 14(1), 89–100. Shek, D. T. L., Zhu, X., Li, X., & Dou, D. (2022). Satisfaction with HyFlex teaching and law-abiding leadership education in Hong Kong university students under COVID-19. <i>Applied Research in Quality of Life</i>, 17(5), 2833–2858. Yu, L., Shek, D. T. L., & Leung, E. Y. K. (2016). Post-lecture evaluation of a university subject on leadership and intrapersonal development. <i>International Journal of Child and Adolescent Health</i>, 9(2), 155–164.	
Student Study Effort Expected	Class contact:	
	Lectures and experiential/online learning activities	39 Hrs.
	Other student study effort:	
	Group project preparation	20 Hrs.
	Reading and writing term paper	61 Hrs.
	Total student study effort	120 Hrs.
Reading List and References	Basic References Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. <i>Prevention and Treatment</i>, 5(15), 1–106. Dalton, J., & Crosby, P. (2007). Being and having: Shouldn't excellence in higher education (and people) be a measure of what one does rather than what one has? <i>Journal of College and Character</i>, 9(1), 1–5. Davies, L. (2006). Global citizenship: abstraction or framework for action? <i>Educational Review</i>, 58(1), 5–25. Dugan, J. P. (2006). Involvement and leadership: A descriptive analysis of socially responsible leadership. <i>Journal of College</i>	

	<i>Student Development</i>, 47(3), 335–343. Dugan, J. P. (2015). The measurement of socially responsible leadership: Considerations in establishing psychometric rigor. <i>Journal of Educational, Cultural and Psychological Studies</i>, 12, 23–42. Hong Kong Government. (2020, July 7). The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region. Available at https://www.isd.gov.hk/nationalsecurity/eng/pdf/NSL_QnA_Book.pdf. Gilley, A., Gilley, J. W., McConnell, C. W., & Veliquette, A. (2010). The competencies used by effective managers to build teams: An empirical study. <i>Advances in Developing Human Resources</i>, 12(1), 29–45. Goleman, D. (1995). <i>Emotional Intelligence: Why it can matter more than IQ</i>. New York: Bantam Books. Houghton, J. D., & Yoho, S. K. (2005). Toward a contingency model of leadership and psychological empowerment: When should self-leadership be encouraged? <i>Journal of Leadership and Organizational Studies</i>, 11(4), 65–84. Kim, Y. H., Chiu, C. Y., & Zou, Z. M. (2010). Know thyself: Misperceptions of actual performance undermine achievement motivation, future performance, and subjective well-being. <i>Journal of Personality and Social Psychology</i>, 99(3), 395–409. Kohlberg, L. (1964). Development of moral character and moral ideology. In M. L. Hoffman, & L. W. Hoffman (Eds.), <i>Review of Child Development Research</i> (pp. 381–431). New York: Russell Sage Foundation. Lau, P. S. Y., & Wu, F. K. Y. (2012). Emotional competence as a positive youth development construct: A conceptual review. <i>The Scientific World Journal</i>, 2012, 8 pages. doi:10.1100/2012/975189 Marsh, H. W. (1990). A multidimensional, hierarchical self-concept: Theoretical and empirical justification. <i>Educational Psychological Review</i>, 2(2), 77–172. Masten, A. S., & Obradović, J. (2006). Competence and resilience in development. <i>Annals of the New York Academy of Sciences</i>, 1094(1), 13–27. Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. (2011). Beyond general intelligence (IQ) and emotional intelligence (EQ): The role of cultural intelligence (CQ) on cross-border leadership effectiveness in a globalized world. <i>Journal of Social Issues</i>, 67(4), 825–840. Rycek, R. F., Stuhr, S. L., McDermott, J., Benker, J., & Swartz, M. D. (1998). Adolescent egocentrism and cognitive functioning during late adolescence. <i>Adolescence</i>, 33(132), 745–749. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. <i>American Psychologist</i>, 55(1), 5–14. Shek, D. T. L. (2010). Nurturing holistic development of university students in Hong Kong: Where are we and where should we go? <i>The Scientific World Journal</i>, 10, 566–575. Shek, D. T. L. (2012). Spirituality as a positive youth development
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	construct: A conceptual review. <i>The Scientific World Journal</i>, 2012, 8 pages. doi:10.1100/2012/458953 Shek, D. T. L., & Leung, H. (2016a). Developing self-leadership and responsibility and moving away from egocentrism. <i>International Journal on Disability and Human Development</i>, 15(2), 157–164. Shek, D. T. L., & Leung, H. (2016b). Resilience as a focus of a subject on leadership and intrapersonal development. <i>International Journal on Disability and Human Development</i>, 15(2), 149–155. Shek, D. T. L., & Leung, J. T. Y. (2016). Developing social competence in a subject on leadership and intrapersonal development. <i>International Journal on Disability and Human Development</i>, 15(2), 165–173. Shek, D. T. L., & Ho, W. W. L. (2016). Nurturing moral competence in university students via a credit-bearing subject. <i>International Journal on Disability and Human Development</i>, 15(2), 181–186. Shek, D. T. L., & Ho, W. W. L. (2016). Spirituality as a key positive youth development construct for university students. <i>International Journal on Disability and Human Development</i>, 15(2), 175–180. Shek, D. T. L. & Ma, C. M. S. (2016). Emotional competence: A key leadership competence for university students. <i>International Journal on Disability and Human Development</i>, 15(2), 127–134. Shek, D. T. L., & Ng, E. C. W. (2017). Leadership training for university students in Hong Kong: A critical review. <i>International Journal of Child and Adolescent Health</i>, 10(1), 25–40. Shek, D. T. L., & Wu, F. K. Y. (2016). Clear and positive identity as an attribute of an effective leader. <i>International Journal on Disability and Human Development</i>, 15(2), 143–148. Shek, D. T. L., & Yu, L. (2016). Cognitive competence: A key positive youth development construct for university students. <i>International Journal on Disability and Human Development</i>, 15(2), 135–142. Shek, D. T. L., Zhu, X., Dou, D., Law, M. Y. M., Yu, L., Ma, C. M. S., & Lin, L. (2019). Nurturing holistic development in university students through leadership courses: The Hong Kong experience. In G. H. Tonon (Ed.), <i>Teaching quality of life in different domains, social indicators research series 79</i> (pp. 61–81). Switzerland: Springer. Supplementary References Adler, R. B., Rosenfeld, L. B., & Proctor II, R. F. (2010). <i>Interplay: The process of interpersonal communication</i>. New York: Oxford University Press. Bandura, A. (1986). <i>Social foundations of thought and action</i>. Prentice-Hall. Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. <i>Leadership Quarterly</i>, 10(2), 181–217. Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning theory perspective for construct development and testing. <i>Organizational Behavior and Human Decision Processes</i>, 97(2), 117–134.
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	Cao, L., & Nietfeld, J. L. (2007). College students' metacognitive awareness of difficulties in learning the class content does not automatically lead to adjustment of study strategies. <i>Australian Journal of Educational and Developmental Psychology</i>, 7, 31–46. Cheung, C. K., & Lee, T. Y. (2010). Contributions of moral education lectures and moral discussion in Hong Kong secondary schools. <i>Social Psychology of Education: An International Journal</i>, 13(4), 575–591. Davey, M., Eaker, D. G., & Walters, L. H. (2003). Resilience processes in adolescents: Personality profiles, self-worth, and coping. <i>Journal of Adolescent Research</i>, 18(4), 347–362. Govier, I. (2000). Spiritual care in nursing: A systematic approach. <i>Nursing Standard</i>, 14(17), 32–36. Kumru, A., & Thompson, R. A. (2003). Ego identity status and self-monitoring behavior in adolescents. <i>Journal of Adolescent Research</i>, 18(5), 481–495. Leung, J. T. Y., & Shek, D. T. L. (2020). Theories of adolescent development: Overview. In D. T. L. Shek, & J. T. Y. Leung (Eds.), <i>The encyclopedia of child and adolescent development</i>. (Volume 7: History, theory, and culture in adolescence). (pp. 2887-2897). Wiley. Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. <i>Human Resource Development Review</i>, 5(1), 25–44. Neck, C. P., & Houghton, J. D. (2006). Two decades of self-leadership theory and research: Past developments, present trends, and future possibilities. <i>Journal of Managerial Psychology</i>, 21(4), 270–295. Shek, D. T. L. (Ed.) (2019). Mental health and well-being of adolescents in Hong Kong [Special issue]. <i>Journal of Adolescent Health</i>, 64(6), S1–S86. Shek, D. T. L., Yu, L., & Merrick, J. (Eds.) (2019). Promotion of holistic development of university students in Hong Kong. [Special issue]. <i>International Journal of Child and Adolescent Health</i>, 12(1), 1–122. Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. <i>Social Development</i>, 6(1), 111–135.
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Note 1: Intended Learning Outcomes

Intended learning outcomes should state what students should be able to do or attain upon completion of the subject. Subject outcomes are expected to contribute to the attainment of the overall programme outcomes.

Note 2: Subject Synopsis/ Indicative Syllabus

The syllabus should adequately address the intended learning outcomes. At the same time over-crowding of the syllabus should be avoided.

Note 3: Teaching/Learning Methodology

This section should include a brief description of the teaching and learning methods to be employed to facilitate learning, and a justification of how the methods are aligned with the intended learning outcomes of the subject.

Note 4: Assessment Method

This section should include the assessment method(s) to be used and its relative weighting, and indicate which of the subject intended learning outcomes that each method purports to assess. It should also provide a brief explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes.

Subject Description Form

Subject Code	DSAI1202
Subject Title	Introduction to Artificial Intelligence and Data Analytics
Credit Value	2
Level	1
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	The objectives of this subject are to: 1. introduce to students the concept and principles of Artificial Intelligence and Data Analytics (AIDA); 2. introduce students to examples of how AIDA can be applied in their own discipline; 3. prepare students for subsequent selection of minor and secondary major in AIDA through strengthening their understanding of using AIDA to solve practical problems; and 4. raise students' awareness of ethical and societal issues stemming from AIDA in daily life.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. demonstrate an understanding of the foundational concepts of Artificial Intelligence and Data Analytics (AIDA); b. acquire basic skills in using AIDA technologies and applications; c. articulate examples of how the adoption of AIDA could enhance their chosen disciplines; and d. demonstrate an awareness of global and local contemporary issues of ethics and impact from AIDA applications in daily life.
Subject Synopsis/ Indicative Syllabus	1. Data analytics basics • Definition of data requirements; Data collection, cleaning, processing, and analytics; • Basic concepts of data analytics methods, e.g. Regression, classification and prediction; Clustering; • Basic concepts of Big data and the cloud. 2. Machine Learning Introduction • Overview of artificial intelligence, machine learning and deep learning; • High-level ideas of supervised vs unsupervised learning techniques; • Performance and accuracy measures, e.g. false positive, false negative, recall, precision, F1 score. 3. Introduction to AIDA applications and their impacts • Chatbots and Conversational AI; • Recommender systems (e.g. Netflix, Amazon.com); • Other AIDA applications: Decision support system, customer

	relationship and click stream analysis, social network and sentiment analysis, recommender system, text translation and summarisation, robot, intelligent transportation system, auto-driving, face recognition, medical image analysis and diagnosis, biometrics and bioinformatics, etc. 4. Societal implications of AIDA - Concerns of data privacy; AI ethics; - Global and societal impacts of AIDA applications. - Applying AIDA to align Hong Kong's development with the "Eight Centres" - International Financial Centre, International Innovation and Technology Centre, East-meets-West Centre for International Cultural Exchange, International Trade Centre, International Shipping Centre, International Aviation Hub, Centre for International Legal and Dispute Resolution Services in the Asia-Pacific region as well as Regional Intellectual Property Trading Centre.
Teaching/Learning Methodology	1. e-Learning Module The e-learning module is developed and delivered by the Department of Computing at PolyU, consisting of readings, exercises and assessments that are designed to introduce students to the basic concept and practice of AIDA. The e-learning module will provide basic foundation concepts about AIDA, as well as their potential global and societal context impacts. A brief understanding about the technology and applications will also be provided. Students are required to successfully complete the e-learning module (including video watching, an after-class exercise, and a lab with the AIDA interactive playground) <u>within the first seven weeks</u> of the semester in which they are taking the subject. 2. Lectures and Seminars AIDA concepts and fundamental skills will be given through lectures. During seminars, there will be in-class activities (e.g. discussions and exercises) to better engage students in active learning. The following are examples of topics to be covered - Concepts of data analytics and its applications. - Concepts of artificial intelligence and its applications in computer vision and natural language processing. - Trendy concepts of machine learning and big data. - The key steps to build AIDA projects, such as sentiment analysis and house price prediction. - The impact of AIDA to our society and various disciplines.

Assessment Methods in Alignment with Intended Learning Outcomes	Students’ performance in this subject will be assessed using a letter-grading system in accordance with the University’s convention from grade F (failure) to A+. The relative weighting of the different assessment components are as follows:																																								
	<table><tr><th rowspan="2">Specific assessment methods/ tasks</th><th rowspan="2">% weighting</th><th colspan="4">Intended subject learning outcomes to be assessed</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th></tr><tr><td>e-Learning module and seminars</td><td>15%</td><td>✓</td><td>✓</td><td></td><td>✓</td></tr><tr><td>Exercises and assignments</td><td>20%</td><td></td><td>✓</td><td></td><td></td></tr><tr><td>Quizzes</td><td>45%</td><td>✓</td><td>✓</td><td></td><td>✓</td></tr><tr><td>Group-based Project or Essay</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>Total</td><td>100%</td><td></td><td></td><td></td><td></td></tr></table>	Specific assessment methods/ tasks	% weighting	Intended subject learning outcomes to be assessed				a	b	c	d	e-Learning module and seminars	15%	✓	✓		✓	Exercises and assignments	20%		✓			Quizzes	45%	✓	✓		✓	Group-based Project or Essay	20%	✓	✓	✓	✓	Total	100%				
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	<i>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</i>																																								
The e-learning module contains assessment questions and lab tasks involving basic foundation concepts about AIDA (ILO a), their potential global and societal context impacts (ILO d), covering also some basic understanding about the technology and applications (ILO b). Participation in seminars will strengthen the elements covered in the e-learning module for the three learning outcomes.																																									
Hands-on exercises will enable students to practice and apply data analytics techniques (ILO b).																																									
Quizzes are given to help students better understand the points discussed in lectures (ILO a), and to gain more related knowledge via after-class reading (ILO d) and learn how to employ the knowledge to solve AIDA problems (ILO b).																																									
Students should work in groups to either work on a project or a research essay.																																									
The former requires a student to study a specific problem within his/her chosen discipline (e.g. business, public health, and social science) (ILO c) and to carry out data analytics tasks related to the problem for a possibly AI-related solution (ILOs a, b). Larger group size might be allowed for larger projects. A brief report will summarise the process and findings. The latter requires a student to read related papers and write a literary review (ILO a, b) to discuss how the AIDA knowledge is applied to handle a specific task in his/her discipline (ILO c).																																									

	Through the assessment task on project or essay, students can appreciate how AIDA methods could help in their career and realise the impact to the society (ILO d).	
Student study effort expected	e-Learning Module	3 hours
	Class Contact	
	• Lecture / Seminars	23 hours
	Other student study effort:	
	• Self-study	22 hours
	• Literary review and essay writing / project development and report writing	22 hours
	Total student study effort	70 hours
Reading list and references	Bishop, & Christopher M. (2016). <i>Pattern recognition and machine learning</i>. Springer. Bissett, B. (2021). <i>Automated data analysis using Excel</i> (2nd ed.). CRC Press. Bruce, P., & Bruce, A. (2017). <i>Practical Statistics for Data Scientists: 50 Essential Concepts</i>. Hastiem, T., Tibshirani, R., & Friedman, J. (2009). <i>The Elements of Statistical Learning: Data Mining, Inference, and Prediction</i> (2nd ed.). Springer. McFedries, P. (2019). <i>Excel data analysis for dummies</i> (4th ed.). Wiley. Russell, S. & Norvig, P. (2021). <i>Artificial Intelligence: A Modern Approach</i> (4th ed.). Pearson. Zhou, H. (2020). <i>Learn Data Mining Through Excel A Step-by-Step Approach for Understanding Machine Learning Methods</i>. Apress.	

December 2024

Subject Description Form

Subject Code	MM1031
Subject Title	Introduction to Innovation and Entrepreneurship
Credit Value	1
Level	1
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject introduces students to the essential aspects of innovation and entrepreneurship in a digital world. The objective is to prepare the first-year students with an entrepreneurial mindset and apply innovative strategies to find creative solutions that benefit both organizations and society in the age of digital transformation, while also bolstering Hong Kong's position as a global hub for innovation and technology.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: - demonstrate an elementary understanding of innovation and entrepreneurship; - appreciate the importance of innovation and entrepreneurship in the local and global community; - appreciate the applications and implications of the latest technologies on entrepreneurship and innovation; and - identify ethical issues in entrepreneurship and innovation.
Subject Synopsis/ Indicative Syllabus	This subject is built upon three pillars – Nature and importance of innovation and entrepreneurship Defining innovation and entrepreneurship; differences between innovation and entrepreneurship; the importance of innovation and entrepreneurship in Hong Kong and beyond; entrepreneurship as a career path; ethical issues Innovation Technology and innovation; technology life cycle; diffusion of innovation; technology leadership and followership; assessing technology needs; making technology decisions; sourcing and acquiring new technologies; organizing for innovation Entrepreneurship Technology and entrepreneurship; design thinking; value proposition canvas; business model canvas; lean start-up

Indicative Outline:*(A) Introduction*

Videos (~10 minutes in total), plus discussion/activities/self-study in between the following topics

- Defining innovation and entrepreneurship
- Differences between innovation and entrepreneurship
- The importance of innovation and entrepreneurship in Hong Kong and beyond
- Entrepreneurship as a career path

(B) Innovation and entrepreneurship toolkit

Videos (~40 minutes in total), plus discussion/activities/self-study in between the following topics

- Design Thinking
- Value Proposition Canvas
- Business Model Canvas
- Lean Start-up (including MVP)

(C) Applications and implications of artificial intelligence on entrepreneurship and innovation

Videos (~40 minutes in total), plus discussion/activities/self-study in between the following topics

- Hand-written digit recognition
- Face detection
- Stock price prediction
- ROC Concept
- Chatbot applications, e.g. customer service, enquiry handling in the customer journey
- Latest A.I. development

(D) Applications and implications of blockchain technology on entrepreneurship and innovation

Videos (~40 minutes in total), plus discussion/activities/self-study in between the following topics

- Defining blockchain technology
- Background
- Applications (e.g. verifying educational or employment credentials, intellectual property, smart contract, billing and revenue allocation, rights and royalties, history of ownership – critical minerals, diamond, fine art, garment, wine and spirits, supply chains, etc.)
- Advantages and Disadvantages
- Ethical implications (e.g. crypto jacking, co-ownership of illegal data, etc.)

(E) Applications and implications of Internet of Things technology on entrepreneurship and innovation

Videos (~40 minutes in total), plus discussion/activities/self-study in between the following topics

- Defining Internet of Things technology
- Background (from 1G to 5G)
- Applications (e.g. daily life, manufacturing, retail, smart cities, etc.)

	• Advantages and Disadvantages • Ethical implications (e.g. privacy, security, etc.) <u>(F) Other Applications:</u> Bio-technology and medical service Guest Lecture or video recording will be arranged (Both online and off-time students are eligible to attend) <u>(G) Managing technology for competitive advantage in a digital world</u> Videos (~10 minutes in total), plus discussion/activities/self-study in between the following topics • Technology life cycle • Diffusion of innovation • Technology leadership and followership • Assessing technology needs • Making technology decisions • Sourcing and acquiring new technologies • Organizing for innovation																																						
Teaching/Learning Methodology	This subject is designed to be interactive, with short videos, cases, in-class discussions and activities interspersed throughout an introductory session and thirteen 1-hour seminars. Students are encouraged to go beyond the understanding of concepts, and to reflect on their learning process. Learning from the responses and feedback from their peers is also critical.																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="4">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th></tr> <tr> <th>a</th><th>b</th><th>c</th><th>d</th></tr> </thead> <tbody> <tr> <td>1. Quizzes</td><td>10%</td><td>✓</td><td></td><td></td><td>✓</td></tr> <tr> <td>2. Participation in discussion forum / journal</td><td>30%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr> <td>3. Personal Reflection</td><td>60%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr> <tr> <td>Total</td><td>100 %</td><td colspan="4"></td></tr> </tbody> </table> Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: Requiring students to answer multiple-choice questions at the end of each module is appropriate for helping the first-year students confirm their understanding of the concepts. The requirement of writing some textual responses is to assess the schema established by the students toward innovation and entrepreneurship.					Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				a	b	c	d	1. Quizzes	10%	✓			✓	2. Participation in discussion forum / journal	30%	✓	✓	✓	✓	3. Personal Reflection	60%	✓	✓	✓	✓	Total	100 %				
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Total	100 %																																						
Student Study Effort Expected	Class contact:																																						
	▪ One online introductory session, plus four online video modules, combined with in-class discussions and activities, interspersed throughout			13 Hrs.																																			

	Other student study effort:	
	▪ Self-study and preparation	20 Hrs.
	▪ Assignment	10 Hrs.
	Total student study effort	43 Hrs.
Reading List and References	Bateman, T. S., & Konopaske, R. (2021). <i>Management: Leading & collaborating in a competitive world</i>. NY: McGraw-Hill. Bamford, C., & Bruton, G. (2022). <i>Entrepreneurship: The art, science, and process for success</i>. McGraw-Hill. Osterwalder, A., & Pigneur, Y. (2010). <i>Business model generation: A handbook for visionaries, game changers, and challengers</i>. Hoboken, NJ: John Wiley & Sons. Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014). <i>Value proposition design: How to create products and services customers want</i>. Hoboken, NJ: John Wiley & Sons. Ries, E. (2011). <i>The lean start-up</i>. NY: Crown Business.	

31 December 2024

For the syllabi of LCR, CAR & SL subjects and HLS, please refer to the links below:

Language and Communication Requirements (LCR) subjects:

<https://www.polyu.edu.hk/cus/GURSubjects/LCR.php>

Cluster-Area Requirements (CAR) subjects:

<https://www.polyu.edu.hk/cus/GURSubjects/CAR.php>

Service-Learning (SL) subjects:

<https://www.polyu.edu.hk/cus/GURSubjects/SL.php>

Healthy Lifestyle Programme (HLS):

<https://www.polyu.edu.hk/cus/GURSubjects/HLS.php>

Subject Description Form

Subject Code	CUS102/CUS1N02
Subject Title	Introduction to Interdisciplinary Studies
Credit Value	3
Level	1
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject is intended to be an initiation into interdisciplinary studies (and by extension, transdisciplinary studies). It aims to open minds and ignite passion, to help students see across conventional academic and disciplinary boundaries, refresh their connection with the world, explore their interests and find their calling, to help them see that they can play a role in solving the unsolved problems and making this world a better place.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Demonstrate an awareness of current issues in society and the world, and explain the relevance of inter/transdisciplinary studies for the creation of a sustainable future b) Analyse the interdependence of the forces in play in complex societal issues and compare the perspectives of different stakeholder groups c) Explore different approaches to inter/transdisciplinary problem solving and knowledge co-creation d) Engage in dialogue on potentially sensitive and controversial topics in an open, respective, and constructive manner e) Reflect on their personal aspirations and learning needs, and develop a personal development plan for pursuing their aspirations
Subject Synopsis/ Indicative Syllabus	Students will learn about the idea of interdisciplinarity in relation to multidisciplinary and transdisciplinary. They will learn about how these ideas came about and why inter/transdisciplinary approaches have become integral to solving complex societal problems. They will learn about the United Nations' sustainability development goals (SDGs) and concepts like corporate social responsibility (CSR) and environmental, social, and governance (ESG), and explore such problems in the local, national, and global contexts using the SDGs as a framework. They will meet with guest speakers from professional bodies, government agencies, and non-governmental organizations (NGOs) to find out how professionals, administrators, and laypeople from different disciplines and backgrounds come together in an effort to solve the most pressing

	problems of facing the society today. <u>Main topics</u> • Disciplinary vs multi-/ inter-/ trans-disciplinary approaches • Rationale for inter/transdisciplinarity • Characteristics of inter/transdisciplinary problem solving • Unsolved problems in local, national, and global contexts • Sustainability Development Goals (3 dimensions and 17 goals) • Corporate Social Responsibility • Environmental, Social, and Governance <u>Indicative schedule</u> <table border="1"> <tr> <td>Week 1</td><td>Introduction to interdisciplinary studies (lecture)</td></tr> <tr> <td>Week 2</td><td>Sustainable development, CSR, and ESG (lecture)</td></tr> <tr> <td>Week 3</td><td>Examples of current issues (sharing)</td></tr> <tr> <td>Week 4</td><td>Nature of complex problems (discussion/debate)</td></tr> <tr> <td>Week 5</td><td>Examples of current SDG-related initiatives (sharing)</td></tr> <tr> <td>Week 6</td><td>Who are the stakeholders (discussion/debate)</td></tr> <tr> <td>Week 7</td><td>Dialogue with stakeholders (guest seminar)</td></tr> <tr> <td>Week 8</td><td>Inter/transdisciplinary problem solving (discussion)</td></tr> <tr> <td>Week 9</td><td>Raising awareness in SDG (class project)</td></tr> <tr> <td>Week 10</td><td>(Class project – preparation)</td></tr> <tr> <td>Week 11</td><td>(Class project – event day)</td></tr> <tr> <td>Week 12</td><td>Reflection on interdisciplinary studies (sharing)</td></tr> <tr> <td>Week 13</td><td>(no class)</td></tr> </table>	Week 1	Introduction to interdisciplinary studies (lecture)	Week 2	Sustainable development, CSR, and ESG (lecture)	Week 3	Examples of current issues (sharing)	Week 4	Nature of complex problems (discussion/debate)	Week 5	Examples of current SDG-related initiatives (sharing)	Week 6	Who are the stakeholders (discussion/debate)	Week 7	Dialogue with stakeholders (guest seminar)	Week 8	Inter/transdisciplinary problem solving (discussion)	Week 9	Raising awareness in SDG (class project)	Week 10	(Class project – preparation)	Week 11	(Class project – event day)	Week 12	Reflection on interdisciplinary studies (sharing)	Week 13	(no class)
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Week 3	Examples of current issues (sharing)																										
Week 4	Nature of complex problems (discussion/debate)																										
Week 5	Examples of current SDG-related initiatives (sharing)																										
Week 6	Who are the stakeholders (discussion/debate)																										
Week 7	Dialogue with stakeholders (guest seminar)																										
Week 8	Inter/transdisciplinary problem solving (discussion)																										
Week 9	Raising awareness in SDG (class project)																										
Week 10	(Class project – preparation)																										
Week 11	(Class project – event day)																										
Week 12	Reflection on interdisciplinary studies (sharing)																										
Week 13	(no class)																										
Teaching/Learning Methodology	Students will engage in a mix of active and experiential learning activities to achieve the intended learning outcomes. Most of the classes will be conducted in the flipped classroom format. • Interactive lectures: The first few lessons will be in the format of an interactive lecture in which the key concepts are introduced. The lectures will be dotted with classroom activities designed to engage students to reflect on current issues and explore their interests (e.g. to see which topics resonate with them). • Flipped classroom: Students will engage in pre-class assignments to explore the various sustainability development goals (SDGs) (e.g. they will look for examples of current issues and initiatives to address such issues at local, national, and global levels) and share their findings, engage in discussions/debates, and work on a class project during class time. • Class project: Students will work together on a class project to raise awareness of the SDGs among PolyU members and explain how engaging in inter/transdisciplinary studies can help create a																										

	sustainable future. It may take the form of a <i>class collage</i> on display on campus for a period during the semester, but it can also be something else, and it can involve other parties (e.g. the PolyU Community of Practice on Education for Sustainable Development). The exact format will be decided by the class in consultation with the subject teacher. • Guest seminar(s): Representatives from the industry, government agencies, and/or NGOs will be invited to share their experiences on how their organisations contribute to the SDGs. Students will engage in conversation with the representatives to explore how inter/transdisciplinary problem solving and knowledge co-creation take place in the real world. • Learning portfolio: The students will focus on situating themselves in sustainable development and connecting it with their personal aspirations. Students will reflect on these topics, connect them to their learning needs, and develop a personal development plan (PDP).																																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th></th></tr><tr><td>1. Presentations (SDG examples)</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr><tr><td>2. Debates/ discussions</td><td>20%</td><td></td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr><tr><td>3. Class project (class collage)</td><td>30%</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr><tr><td>4. Learning Portfolio (reflection+PDP)</td><td>30%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td></tr><tr><td>Total</td><td>100 %</td><td colspan="6"></td></tr></table> All group activities, presentations, debates/discussions, and the class project will be conducted in teams of students from different disciplines, or BDSIS students with different focus areas to foster inter/transdisciplinarity. Presentations: Students will look for examples of current issues and initiatives to address such issues at local, national, and global levels and share their findings in class. Their choice and interpretation of examples will give evidence to their attainment of outcomes (a), (b), and (c). There will be three sharing sessions. Students will be individually graded in each session. Students can choose the best two performances for assessment.	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e		1. Presentations (SDG examples)	20%	✓	✓	✓				2. Debates/ discussions	20%		✓	✓	✓			3. Class project (class collage)	30%	✓	✓	✓				4. Learning Portfolio (reflection+PDP)	30%	✓	✓	✓	✓	✓		Total	100 %						
Specific assessment methods/tasks	% weighting			Intended subject learning outcomes to be assessed (Please tick as appropriate)																																																			
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3. Class project (class collage)	30%	✓	✓	✓																																																			
4. Learning Portfolio (reflection+PDP)	30%	✓	✓	✓	✓	✓																																																	
Total	100 %																																																						

	Debates/discussions: Students will be given a discussion topic to consider one week before the discussion session and will take part in debate/discussion in class. The arguments they make and the manner in which they deliver them will give evidence to their attainment of outcomes (b), (c), and (d). There will be three discussion sessions. Students will be individually graded in each session. Students can choose the best two performances for assessment. Class project: Students will engage in a class project to raise awareness of others in the SDGs. This will require them to explain the facts and concepts to laypeople, thus testing the breadth and depth of their knowledge and understanding of such facts and concepts and providing evidence for their attainment of outcomes (a), (b), and (c). Feedback will be provided to students during the preparation stage. Assessment will in part be based on the feedback of the ‘visitors.’ A group grade will be given to the whole class after the ‘event.’ Portfolio: Entries to the portfolio in will include: (1) a 1000-word reflection on sustainable development, their role in it, and their personal aspirations; (2) a personal development plan based on their own assessment of their learning needs, with a 500-word explanatory note. Item (1) provides evidence for outcomes (a), (b), and (c); Item (2) provides evidence for outcomes (d) and (e). Students can discuss their personal development plan with their academic advisors and make revisions before submitting the portfolio for assessment.	
Student Study Effort Expected	Class contact:	
	▪ Face-to-face classes	39 Hrs.
	Other student study effort:	
	▪ Pre-class assignments	26 Hrs.
	▪ Class project	40 Hrs.
	▪ Portfolio	30 Hrs.
	Total student study effort	135 Hrs.
Reading List and References	<u>Key References</u> Baum, S. D. (2021). Artificial interdisciplinarity: Artificial intelligence for research on complex societal problems. <i>Philosophy & Technology</i>, 34(Suppl 1), 45–63. https://doi.org/10.1007/s13347-020-00416-5 Bernstein, J. H. (2015). Transdisciplinarity: A review of its origins, development, and current issues. <i>Journal of Research Practice</i>, 11(1), Article R1. https://academicworks.cuny.edu/kb_pubs/37/ Bryson, J. M. (2004). What to do when stakeholders matter: Stakeholder	

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Subject Description Form

Subject Code	CUS202						
Subject Title	Interdisciplinary Research Methods						
Credit Value	3						
Level	2						
Pre-requisite/ Co-requisite/ Exclusion	Nil						
Objectives	This subject aims to equip students with the basic concepts and techniques for conducting formal research on complex societal issues. It introduces students to the fundamentals of research design, research methodology, and research ethics. It prepares students for self-directed study as well as for planning their capstone projects.						
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Conduct literature review and formulate research questions for inter/transdisciplinary studies b) Design inter/transdisciplinary research based on sound conceptual frameworks, research paradigms, and ethical principles c) Identify, select, and employ a coherent mix of research methods for studying complex societal problems d) Analyse and interpret quantitative and qualitative data, and report research findings according to academic conventions						
Subject Synopsis/ Indicative Syllabus	This subject introduces students to research methodologies across disciplines, emphasising the integration of diverse perspectives and methods. Students will learn to design, conduct, and present research that transcends traditional disciplinary boundaries. <u>Main topics</u> • Research ethics • Literature review, citation, and referencing • Theoretical frameworks for inter/transdisciplinary research • Research design (including action research) • Quantitative research methods • Qualitative research methods (including participatory methods) <u>Indicative schedule*</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Week 1</td><td>Introduction to research</td></tr> <tr> <td>Week 2</td><td>Planning a research project</td></tr> <tr> <td>Week 3</td><td>Literature review and question formulation</td></tr> </table>	Week 1	Introduction to research	Week 2	Planning a research project	Week 3	Literature review and question formulation
Week 1	Introduction to research						
Week 2	Planning a research project						
Week 3	Literature review and question formulation						

	<table><tr><td>Week 4</td><td>Research design and methodology</td></tr><tr><td>Week 5</td><td>Quantitative research</td></tr><tr><td>Week 6</td><td>Qualitative research</td></tr><tr><td>Week 7</td><td>Mixed methods research</td></tr><tr><td>Week 8</td><td>(Mini project - planning)</td></tr><tr><td>Week 9</td><td>Presentation of project plan</td></tr><tr><td>Week 10</td><td>(Mini project - data collection)</td></tr><tr><td>Week 11</td><td>(Mini project - data analysis)</td></tr><tr><td>Week 12</td><td>Presentation of analysis</td></tr><tr><td>Week 13</td><td>Reflection on research experience</td></tr></table> * A two-hour class per week	Week 4	Research design and methodology	Week 5	Quantitative research	Week 6	Qualitative research	Week 7	Mixed methods research	Week 8	(Mini project - planning)	Week 9	Presentation of project plan	Week 10	(Mini project - data collection)	Week 11	(Mini project - data analysis)	Week 12	Presentation of analysis	Week 13	Reflection on research experience																																		
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Week 13	Reflection on research experience																																																						
Teaching/Learning Methodology	Students will engage in a mix of active and experiential learning activities to achieve the intended learning outcomes. • Interactive lectures: Students will explore the characteristics of inter/transdisciplinary research and key concepts in research design, methods, and ethics through a series of interactive lectures. The lectures will be dotted with classroom activities designed to enable students to make the right choices when planning and designing research and analysing and interpreting data under different research paradigms. • Mini project: Students will form groups to work on a mini research project. Given a topic, each group will formulate their own research questions, plan and carry out the research, and analyse and interpret the data. They will present the plan and analysis in groups and write a report and a reflection individually.																																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th></th><th></th></tr><tr><td>1. Plan</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr><tr><td>2. Analysis</td><td>20%</td><td></td><td></td><td></td><td>✓</td><td></td><td></td></tr><tr><td>3. Report</td><td>40%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td></tr><tr><td>4. Reflection</td><td>20%</td><td></td><td>✓</td><td></td><td></td><td></td><td></td></tr><tr><td>Total</td><td>100 %</td><td colspan="6"></td></tr></table> All four assignments are related to the mini project. Project plan: Students will work in groups to develop a project plan. The project plan should include a literature review leading to a research question and a description and explanation of the research	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			1. Plan	20%	✓	✓	✓				2. Analysis	20%				✓			3. Report	40%	✓	✓	✓	✓			4. Reflection	20%		✓					Total	100 %						
Specific assessment methods/tasks	% weighting			Intended subject learning outcomes to be assessed (Please tick as appropriate)																																																			
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3. Report	40%	✓	✓	✓	✓																																																		
4. Reflection	20%		✓																																																				
Total	100 %																																																						

	paradigm and methodology to be adopted. Students will present the plan in groups, and a group grade will be given to the whole group based on the presentation. Analysis: Students will work in groups to collect and analyse data according to the project plan. Students will present the analysis and discuss the findings in groups, and a group grade will be given to the whole group based on the presentation. Report: Students will write a 1500-word report individually for the project that they have undertaken in groups. The report should include the four typical sections of academic research (introduction, methodology, results, discussion) and proper referencing (excluded from the word count). This is an individual assignment. Reflection: Students will write a 500-word reflection on (1) how the project illustrates the characteristics of inter/transdisciplinary research and (2) what they have learned about the research process from this experience.	
Student Study Effort Expected	Class contact:	
	▪ Face-to-face classes	26 Hrs.
	Other student study effort:	
	▪ Prep and self-study	39 Hrs.
	▪ Mini project	40 Hrs.
	▪ Report and reflection writing	30 Hrs.
	Total student study effort	135 Hrs.
Reading List and References	<u>Key References</u> Aboelela, S. W., Larson, E., Bakken, S., Carrasquillo, O., Formicola, A., Glied, S. A., Haas, J., & Gebbie, K. M. (2007). Defining interdisciplinary research: Conclusions from a critical review of the literature. <i>Health Services Research</i>, 42(1), 329–346. https://doi.org/10.1111/j.1475-6773.2006.00621.x Andersson, A., & Kalman, H. (2010). Reflections on learning in interdisciplinary settings. <i>International Journal of Teaching and Learning in Higher Education</i>, 22(2), 204–208. Austin, W., Park, C., & Goble, E. (2008). From interdisciplinary to transdisciplinary research: A case study. <i>Qualitative Health Research</i>, 18(4), 557–564. https://doi.org/10.1177/1049732307308514 Bridle, H., Vrieling, A., Cardillo, M., Araya, Y., & Hinojosa, L. (2013). Preparing for an interdisciplinary future: A perspective from early-career researchers. <i>Futures</i>, 53, 22–32. https://doi.org/10.1016/j.futures.2013.09.003	

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Subject Description Form

Subject Code	CUS201				
Subject Title	Reflections on Contemporary Issues I				
Credit Value	3				
Level	2				
Pre-requisite/ Co-requisite/ Exclusion	CUS102				
Objectives	This subject aims to provide students with the space and opportunities to explore their areas of interest in depth through desktop research as well as interacting with people. They will learn how to sift through layers of information and diverse perspectives in order to develop a critical understanding of the current societal issues of their interest, which will be the foundation for working towards solving such issues.				
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Explore specific areas of sustainable development from an inter/transdisciplinary perspective for agenda-setting b) Evaluate opinions and data related to complex societal issues to form a critical understanding of the issues c) Identify the factors/conditions for the development and implementation of successful social innovations d) Engage in dialogue with people from different disciplines and sectors to explore different perspectives on a common issue e) Reflect on their knowledge base and learning needs and how well they learn across different learning scenarios, and refine their learning plan, approach, and strategy				
Subject Synopsis/ Indicative Syllabus	Students will delve deep into focus areas of their choice, study the relevant literature and information, and engage in dialogue with stakeholders to gain insights into the unsolved issues in that area. <u>Main topics</u> • Social innovation • Critical thinking (engaging with information) • Communication (engaging in dialogue) <u>Indicative schedule*</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Week 1</td><td>Briefing and form study groups</td></tr> <tr> <td>Week 2</td><td>Social innovation (lecture)</td></tr> </table>	Week 1	Briefing and form study groups	Week 2	Social innovation (lecture)
Week 1	Briefing and form study groups				
Week 2	Social innovation (lecture)				

	Week 3	Engaging with information (lecture)
	Week 4	Engaging in dialogue (lecture)
	Week 5	(Group study)
	Week 6	Study group seminar (sharing)
	Week 7	(Group study)
	Week 8	Study group seminar (sharing)
	Week 9	(Forum – final preparation)
	Week 10	Student-led forum
	Week 11	(Further research into the issues)
	Week 12	Reflection on contemporary issues (sharing)
	Week 13	(no class)
	* A two-hour class per week	
Teaching/Learning Methodology	Students will engage in a mix of independent and collaborative learning activities to achieve the intended learning outcomes. There will be periods of group study and student-led seminars and forums. Most of the classes will be conducted in the flipped classroom format. • Study groups: Students will form groups based on their interest and study an SDG-related topic of their choice to find out the status quo (e.g. what is currently on the agenda, what has been done and how effective, who the stakeholders are, what the unsolved issues are, and why they have remained unsolved). They will share what they have learned in two seminars. These seminars serve as preparation for the main presentation at the forum. • Interactive lectures: Three lectures on social innovations, engaging in dialogue, and critical thinking are designed to prepare students for the group study, the forum, and the independent case study, respectively. • Student-led forum: Students will plan the forum as a class together with the subject teacher. The study groups will present their findings to a group of fellow students and staff (and external stakeholders) from across subject disciplines in a semi-open forum. They will engage in a dialogue with them to explore different perspectives on the issues (e.g. what the unsolved issues are and why, what factors affect the effectiveness of social innovations, and what the priorities should be). • Case studies: Students will independently consolidate the material gathered from the study groups and forum (and from other sources and/or further studies as deemed appropriate) into a case study, in which they will evaluate the opinions and data to form a critical understanding of the issues. • Learning portfolio: Students will continue working on the learning portfolio which they have started in Year 1. Year 2 will focus on self-management as learners. Students will reflect on	

	their knowledge base and learning needs in perspective of their personal and career aspirations as well as how well they learn across different learning scenarios as presented to them in a variety of curricular and co-curricular activities in Year 1 and Year 2. They will refine their learning plan, approach, and strategy in the light of these reflections.							
Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c	d	e	
	1. Presentations (seminars)	20%	✓	✓	✓	✓		
	2. Class project (forum)	30%	✓			✓		
	3. Case study	30%	✓	✓	✓			
	4. Portfolio	20%					✓	
	Total	100 %						
	Presentations: Students will form groups, study a topic of their choice, and share their findings in two student-led seminars. Their presentation and analysis will give evidence to their attainment of outcomes (a), (b), and (c). Students will be individually graded in each session. Students can choose the best performances for assessment. Class project: Students will organise a forum to explore different perspectives on the topics that they are studying. This will require them to explain what they have learned about the topics to laypeople and engage in dialogue with them. This will provide evidence for their attainment of outcomes (a) and (d). A group grade will be given to the whole class based on their presentation and interaction with the participants. Case study: Students will consolidate what they have learned about the topic into case studies, which will provide evidence to their attainment of outcomes (a), (b), and (c). This is an individual assignment. Portfolio: Entries to the portfolio in Year 2 will include the case study, along with a 500-1000-word reflection on how well they understand the issue that they are studying, how well they are learning across different scenarios, and how they will need to adjust their personal development plans or learning approach in order to achieve their aspirations and goals. The reflections provide evidence for outcomes (e). Students can consult their academic advisors and make revisions before submitting the portfolio.							

Student Study Effort Expected	Class contact:	
	▪ Face-to-face classes	25 Hrs.
	Other student study effort:	
	▪ Group study	50 Hrs.
	▪ Class project	30 Hrs.
	▪ Portfolio	30 Hrs.
	Total student study effort	135 Hrs.
Reading List and References	Students will need to read widely on the topic of their choice. <u>Key References</u> Avelino, F., Wittmayer, J. M., Pel, B., Weaver, P., Dumitru, A., Haxeltine, A., Kemp, R., Jørgensen, M. S., Bauler, T., Ruijsink, S. & O’Riordan, T. (2019). Transformative social innovation and (dis)empowerment. <i>Technological Forecasting and Social Change</i>, 145, 195–206. https://doi.org/10.1016/j.techfore.2017.05.002 Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Conceptualizing critical thinking. <i>Journal of Curriculum Studies</i>, 31(3), 285–302. https://doi.org/10.1080/002202799183133 Baker, S., & Mehmood, A. (2015). Social innovation and the governance of sustainable places. <i>Local Environment</i>, 20(3), 321–334. https://doi.org/10.1080/13549839.2013.842964 Breakstone, J., Smith, M., Wineburg, S., Rapaport, A., Carle, J., Garland, M., & Saavedra, A. (2021). Students’ civic online reasoning: A national portrait. <i>Educational Researcher</i>, 50(8), 505–515. https://doi.org/10.3102/0013189X211017495 Browne, M. N., & Keeley, S. M. (2015). <i>Asking the right questions: A guide to critical thinking</i> (11th ed.). Pearson Education. Cottrell, S. (2023). <i>Critical thinking skills: Effective analysis, argument and reflection</i> (4th ed.). Bloomsbury Publishing. Dionisio, M., de Souza Junior, S. J., Paula, F., & Pellanda, P. C. (2024). The role of digital social innovations to address SDGs: A systematic review. <i>Environment, Development and Sustainability</i>, 26, 5709–5734. https://doi.org/10.1007/s10668-023-03038-x Ennis, R. H. (2015). Critical thinking: A streamlined conception. In M. Davies & R. Barnett (Eds.), <i>The Palgrave handbook of critical thinking in higher education</i> (pp. 31–47). Palgrave Macmillan. https://doi.org/10.1057/9781137378057_2 Gerlich, M. (2025). AI tools in society: Impacts on cognitive offloading and the future of critical thinking. <i>Societies</i>, 15(1), Article 6. https://doi.org/10.3390/soc15010006 Grimm, R., Fox, C., Baines, S., & Albertson, K. (2013). Social innovation, an answer to contemporary societal challenges? Locating the concept in theory and practice. <i>Innovation: The European Journal of Social Science Research</i>, 26(4), 436–455.	

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Subject Description Form

Subject Code	CUS301				
Subject Title	Reflections on Contemporary Issues II				
Credit Value	3				
Level	3				
Pre-requisite/ Co-requisite/ Exclusion	CUS201				
Objectives	This subject aims to support students in the transition from knowing to acting, from understanding to solving the complex societal issues that they have been studying. It prompts them to start pulling the threads together—visions, knowledge, skills, and people—and work their way towards a viable proposal for a capstone project that addresses a present-day challenge of significance.				
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Lead discussions in specific areas of sustainable development with a view to formulating ethical and actionable plans for addressing specific issues b) Integrate knowledge from different disciplines and information sources to formulate and evaluate solutions for addressing complex societal challenges c) Work with people from different disciplines and sectors to develop a shared vision/understanding and find solutions to complex problems d) Reflect on their knowledge base and ability to learn and function in an inter/transdisciplinary context and refine their learning plan, approach and strategy				
Subject Synopsis/ Indicative Syllabus	Students will integrate what they learned across the subjects they have taken so far and work with people from different backgrounds to find solutions and formulate strategies for addressing issues in specific areas of sustainable development. <u>Main topics</u> • Effecting change on a large scale • Community engagement and networking • Knowledge synthesis and research integration <u>Indicative schedule*</u> <table border="1" style="width: 100%;"> <tr> <td style="width: 20%;">Week 1</td><td>Briefing and forming study groups</td></tr> <tr> <td>Week 2</td><td>Effecting change on a large scale (lecture)</td></tr> </table>	Week 1	Briefing and forming study groups	Week 2	Effecting change on a large scale (lecture)
Week 1	Briefing and forming study groups				
Week 2	Effecting change on a large scale (lecture)				

	Week 3	Community engagement and networking (lecture)
	Week 4	Knowledge synthesis and integration (lecture)
	Week 5	(Group study)
	Week 6	Study group seminar (sharing)
	Week 7	(Group study)
	Week 8	Study group seminar (sharing)
	Week 9	(Forum – final preparation)
	Week 10	Student-led forum
	Week 11	(Further research into the issues)
	Week 12	Reflection on contemporary issues (sharing)
	Week 13	(no class)
	* A two-hour class per week	
Teaching/Learning Methodology	Students will engage in a mix of independent and collaborative learning activities to achieve the intended learning outcomes. There will be periods of group study, student-led seminars, and forums. Most of the classes will be conducted in the flipped classroom format. • Study groups and seminars: Students will form groups based on their interests and study an SDG-related topic of their choice to formulate strategies for engaging stakeholders and finding solutions for the issues identified. They will lead seminars to discuss and refine their strategies. The group study and seminars are integrated with the planning and preparation for the forum. • Interactive lectures: The lectures are designed to prepare students for the group study, the forum, and the independent case study, respectively. Students will be engaged in a variety of in-class activities to explore relevant tools and techniques. • Student-led forum: Students will plan and organise the forum as a class together with the subject teacher. They will set the agenda, identify relevant stakeholders, and invite them to participate in the forum. They will lead the discussion to explore potential solutions for complex societal challenges. This will be an opportunity to network with potential partners for the capstone project. • Case studies: Students will independently consolidate the material gathered from the study groups and forum (and from other sources and/or further studies, as deemed appropriate) into a case study, in which they will formulate and evaluate solutions for addressing complex societal challenges. This can provide the basis for the capstone project. • Learning portfolio: Students will continue working on the learning portfolio which they have started in Year 1. In addition to self-management as learners, students will reflect on how well they are able to learn and function in an inter/transdisciplinary	

	context. They will continue to refine their learning plan, approach, and strategy in the light of these reflections.							
Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
			a	b	c	d		
	Seminars	20%	✓		✓			
	Class project (forum)	30%	✓		✓			
	Case study	30%	✓	✓				
	Portfolio	20%				✓		
	Total	100 %						
	Seminars: Students will form groups to work on strategies and discuss their strategies as a class in two student-led seminars. The way they lead and engage in discussions will provide evidence of their attainment of outcomes (a) and (c). Students will be individually graded in each session. Students can choose the best performances for assessment. Class project: Students will organise a forum to explore solutions for the issues that they are studying. This will require them to liaise with stakeholders from diverse backgrounds, lead discussions on relevant issues, and work with the stakeholders to explore solutions for the issues. This will provide evidence for their attainment of outcomes (a) and (c). A group grade will be given to the whole class based on how well the forum is organised and how effectively the stakeholders are engaged. Case study: Students will consolidate what they have learned about the topic into case studies, which will give evidence to their attainment of outcomes (a) and (b). This is an individual assignment. Portfolio: Entries to the portfolio in Year 3 will include the case study with a 500–1000-word reflection on how well they understand the issue that they are studying, how well they are learning in an inter/transdisciplinary setting, and how they will need to adjust their personal development plans or learning approach in order to achieve their aspirations and goals. The reflections provide evidence for outcome (d). Students can consult their academic advisors and make revisions before submitting the portfolio.							
Student Study	Class contact:							

Effort Expected	▪ Face-to-face classes	25 Hrs.
	Other student study effort:	
	▪ Group study	50 Hrs.
	▪ Class project	30 Hrs.
	▪ Portfolio	30 Hrs.
	Total student study effort	135 Hrs.
Reading List and References	Students will need to read widely on the topic of their choice. <u>Key References</u> Adger, W. N., Barnett, J., Brown, K., Marshall, N., & O'Brien, K. (2013). Cultural dimensions of climate change impacts and adaptation. <i>Nature Climate Change</i>, 3(2), 112–117. https://doi.org/10.1038/nclimate1666 Allen, C., & Malekpour, S. (2023). Unlocking and accelerating transformations to the SDGs: A review of existing knowledge. <i>Sustainability Science</i>, 18(4), 1939–1960. https://doi.org/10.1007/s11625-023-01342-z Anthony, B. (2024). The role of community engagement in urban innovation towards the co-creation of smart sustainable cities. <i>Journal of the Knowledge Economy</i>, 15(1), 1592–1624. https://doi.org/10.1007/s13132-023-01176-1 Bammer, G., O'Rourke, M., O'Connell, D., Neuhauser, L., Midgley, G., Klein, J. T., Grigg, N. J., Gadlin, H., Elsum, I. R., Bursztyn, M., Fulton, E. A., Pohl, C., Smithson, M., Vilsmaier, U., Bergmann, M., Jaeger, J., Merckx, F., Vienni Baptista, B., Burgman, M. A., ... Richardson, G. P. (2020). Expertise in research integration and implementation for tackling complex problems: When is it needed, where can it be found and how can it be strengthened? <i>Palgrave Communications</i>, 6(1), Article 5. https://doi.org/10.1057/s41599-019-0380-0 Benneworth, P. (2018). Definitions, approaches and challenges to community engagement. In P. Benneworth, B. Čulum, T. Farnell, F. Kaiser, M. Seeber, N. Šćukanec, H. Vossensteyn, & D. Westerheijden (Ed.), <i>Mapping and critical synthesis of current state-of-the-art on community engagement in higher education</i> (pp. 16–46). Institute for the Development of Education. Bennich, T., Persson, Å., Beaussart, R., Allen, C., & Malekpour, S. (2023). Recurring patterns of SDG interlinkages and how they can advance the 2030 Agenda. <i>One Earth</i>, 6(11), 1465–1476. https://doi.org/10.1016/j.oneear.2023.10.008 Berg, J., Snene, M., & Velasco, L. (2024). <i>Mind the AI divide: Shaping a global perspective on the future of work</i>. United Nations and International Labour Organization. https://doi.org/10.18356/9789211066524 Bowser, G., Ho, S. S., Ziebell, A., & Lazendic-Galloway, J. (2024). Networking and collaborating: The role of partnerships across	

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Subject Description Form

Subject Code	CUS401
Subject Title	Interdisciplinary Capstone
Credit Value	6
Level	4
Pre-requisite/ Co-requisite/ Exclusion	All Level 1-3 inter/transdisciplinary core subjects
Objectives	This subject is intended to be a capstone experience for students to integrate and apply what they have learned throughout the university study for a meaningful cause. It aims to give students the opportunity to demonstrate (for themselves and the world) that they are uniquely well-equipped to handle and thrive in this complex world and contribute meaningfully to creating a sustainable future for society.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Demonstrate a strong commitment to creating a sustainable future for the benefit of society and the readiness to act and lead in specific areas of sustainable development with integrity, pride, and professionalism. b) Examine real-world issues from an interdisciplinary perspective, evaluate information critically, and synthesise different viewpoints to form a holistic understanding. c) Integrate and apply in-depth knowledge and modes of thinking from two or more disciplines to develop innovative and entrepreneurial solutions to complex local, national, and/or global challenges. d) Communicate and collaborate effectively with people from different disciplines and sectors with sensitivity and understanding. e) Commit to lifelong learning, plan their studies purposefully, and adapt effectively to different learning situations and challenging circumstances.
Subject Synopsis/ Indicative Syllabus	Students will engage in an inter/transdisciplinary project with trans-sector partnership. The project should address a local, national, and/or global issue of significance. It can be research-oriented or practice-oriented or both. The topic should be related to one or more of the United Nation's Sustainable Development Goals (SDGs). Students can work independently or in teams (up to four students per team). They will define their project focus in consultation with their mentors, develop a project proposal with input from stakeholders, carry out the project, report progress in monthly seminars throughout the process,

	and deliver a project report at the end.																																																														
Teaching/Learning Methodology	Students will carry out the project under the supervision of one or more mentors. • Project-based learning: Students will engage in the entire process of a substantial project of their own design. The project brief is designed to allow students to demonstrate their commitment to creating a sustainable future, their ability to adopt an inter/transdisciplinary perspective, develop innovative and entrepreneurial solutions, and collaborate with people from different disciplines and sectors in tackling complex societal challenges. • Monthly seminars: Students will report progress in monthly seminars. The seminars also serve as a venue for sharing and troubleshooting. • Supervision: Students will carry out the project under the supervision of one or more academic staff. • Learning portfolio: Students will complete the learning portfolio which they have started in Year 1. It provides a venue for students to reflect on their entire learning journey, how far they have come, and where they are going as a professional, a learner, and a person.																																																														
Assessment Methods in Alignment with Intended Learning Outcomes	<table><tr><th rowspan="2">Specific assessment methods/tasks</th><th rowspan="2">% weighting</th><th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th></th></tr><tr><td>1. Proposal</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td></tr><tr><td>2. Seminars</td><td>20%</td><td></td><td></td><td></td><td>✓</td><td>✓</td><td></td></tr><tr><td>3. Final report</td><td>40%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td></tr><tr><td>4. Exhibition</td><td>10%</td><td>✓</td><td></td><td></td><td>✓</td><td></td><td></td></tr><tr><td>5. Portfolio</td><td>10%</td><td></td><td></td><td></td><td></td><td>✓</td><td></td></tr><tr><td>Total</td><td>100 %</td><td colspan="6"></td></tr></table> Proposal: Students will develop a project proposal with input from stakeholders. The choice of topic, the review of literature, the analysis of information and opinions, the formulation of solutions, and the project plan, provide evidence for the attainment of all outcomes (a), (b), (c), (d), and (e). A group grade will be given to students working in groups.	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e		1. Proposal	20%	✓	✓	✓	✓	✓		2. Seminars	20%				✓	✓		3. Final report	40%	✓	✓	✓	✓	✓		4. Exhibition	10%	✓			✓			5. Portfolio	10%					✓		Total	100 %						
Specific assessment methods/tasks	% weighting			Intended subject learning outcomes to be assessed (Please tick as appropriate)																																																											
		a	b	c	d	e																																																									
1. Proposal	20%	✓	✓	✓	✓	✓																																																									
2. Seminars	20%				✓	✓																																																									
3. Final report	40%	✓	✓	✓	✓	✓																																																									
4. Exhibition	10%	✓			✓																																																										
5. Portfolio	10%					✓																																																									
Total	100 %																																																														

	Seminars: Students will report their progress in monthly seminars. The way students present their ideas, engage in discussion, and reflect on their progress will give evidence to their attainment of outcomes (d) and (e). Students will be individually graded in each session. Students can choose the best performances for assessment. Final report: Students will carry out the project and deliver a report at the end. The final report is an individual assignment even for students working in groups. The report should contain around 8000-10000 words and be written in a format appropriate for the project (e.g. consultancy report, research paper, or practice dissertation). The report will provide evidence of the attainment of all learning outcomes and will be reviewed by both the mentor and the stakeholder partners engaged. Exhibition: Students will showcase the outcomes of their projects in a public exhibition. A group grade will be given to the whole class based on visitor feedback. Portfolio: Entries to the portfolio in Year 4 will include the project report and other artefacts with a 500-1000-word reflection on the learning journey that the student has come through, focusing on (1) the experience of completing the final project, (2) development as a learner since joining the university, and (3) readiness and learning plans for new challenges in the future. The reflections provide evidence for the attainment of the outcome (e). Students can consult their academic advisors and make revisions before submitting the portfolio.	
Student Study Effort Expected	Class contact:	
	▪ Monthly seminars	10 Hrs.
	Other student study effort:	
	▪ Project (including proposal)	230 Hrs.
	▪ Exhibition	20 Hrs.
	▪ Portfolio	10 Hrs.
	Total student study effort	270 Hrs.
Reading List and References	<u>Key References</u> Azam, A., Ahmed, A., Li, H., Tairab, A. M., Jia, C., Li, N., & Zhang, Z. (2022). Design and analysis of the optimal spinning top-shaped buoy for wave energy harvesting in low energy density seas for sustainable marine aquaculture. <i>Ocean Engineering</i>, 255, Article 111434. https://doi.org/10.1016/j.oceaneng.2022.111434 Babbie, E. R. (2016). <i>The practice of social research</i>. (14th ed.). Cengage Learning.	

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